From: abridle (Alan Bridle)
To: rl@ast-star.cam.ac.uk
Subject: copy of message from AHB to PAGS, FYI
Date: Thu, 24 Sep 92 16:34:21 -0400

------- Start of forwarded message -------

From: abridle (Alan Bridle)
To: pags@phx.cam.ac.uk
Subject: Spectral asymmetry proposal
Date: Thu, 24 Sep 92 16:22:37 -0400

Looked fine to me, except that I can't really see why 3C215 was
excluded, it has a perfectly clear jet sidedness even though
one of its lobes is really FR-I-ish. I agree fully that this
is an important test for intrinsic asymetries and am anxious to
know the result!

I notice that you proposed that the student come to NRAO for data
reduction. He would be welcome to come to Charlottesville for that if
you think it would help to have one of the collaborators around to
consult with/share the load with. (We have exactly the same computer
resources for VLA data reduction here as in Socorro now. I also have
a spare bedroom and study in my house that can be quite civilized
accommodation for a "working guest" if they don't mind being a few
miles out of town -- the NRAO also has guest accommodation available
in a house that is just a short walk from the observatory building
here in Charlottesville).

In any case, if any help is needed with the observing preparation,
data reduction, or arrangements for a visit, please let me know.

Best wishes, Alan
------- End of forwarded message -------

From: PAGS@phx.cam.ac.uk
To: (Alan Bridle) abridle <abridle@polaris.cv.nrao.edu>
Subject: Re: [Spectral asymmetry proposal]
Date: Mon, 28 Sep 92 15:20:38 BST

Dear Alan,
Great to hear from you, and I'm glad that on the whole you approve. The reason for excluding 215 was indeed that it is such an odd source.

I am overwhelmed by your kind offer to look after Stephen. He certainly needs looking after at this time, and personal tuition by an old hand such as yourself would be an inestimable advantage. He has had a terrible sequence of troubles and is not here just now, and I will write again when he returns to Cambridge.

Best wishes Peter

From: PAGS@phx.cam.ac.uk
To: (Alan Bridle) abridle <abridle@polaris.cv.nrao.edu>
Subject: Re: [Spectral asymmetry proposal]
Date: Fri, 09 Oct 92 14:34:19 BST

Dear Alan,
my student Stephen Turner is now back in Cambridge, and our observations are scheduled on the VLA at the end of October as you know already, so it's time to think about arrangements. There are several questions I'd like to ask you. Stephen tells me he is free to go any time after Nov 8. So the first question is, how soon after the observations does it make sense to come to Charlottesville, and what dates are convenient for you! I am currently investigating ways of financing his trip (less clear than usual as he is not an SERC student...) and it would also be helpful if you could give me an idea of his likely expenses at Charlottesville; I expect he will be very happy about your very generous offer to put him up, but he will need to stay for several weeks as he still has much to learn, and cannot possibly expect you and yours to look after him for all of that time.

Regarding preparation for observations, Robert Laing seems happy to deal with this as his job as PI, but he has of course seen your message and will no doubt be in touch with you over any problems.

Best wishes Peter

From: abridle (Alan Bridle)
To: PAGS@phx.cam.ac.uk
Subject: Re: [Spectral asymmetry proposal]
Date: Fri, 9 Oct 92 11:17:05 -0400

Hello Peter,

I've just sent a message to the data analysts at the VLA to get their estimate of a "safe" time interval to expect the data to show uo here in C'ville following the run non Oct. 31st. I've seen a very wide variation in this recently, from a few days to over 2 weeks, so I think it will pay off to wait to hear their estimate of the actual load they will be facing at the end of the month.

Re arrangements here in C'ville -- probably what would work out best would be for Stephen to stay at our house at first while he and I are likely to be spending a lot of time together with the data set anyway, and then move into the Alden House later when he might want to burn the midnight oil some more and thus be quartered more independently and closer to the observatory. He would be welcome to stay at our house for the whole time if he wanted, we have quite a comfortable arrangement with a bedroom, bathroom and study in our basement, and we've had visitors with us before for several weeks, But I suspect that it would get to be inefficient for him to stay there once he is really "off to the races" with work on the data. Our house is about 7 miles out of town, and I don't have a *reliable* extra car to offer a visitor (I do have an *unreliable* one, but that is an offer any visitor is well advised to refuse, and a rental car would probably be the only practical solution). The Alden House is about half a mile up the hill from the NRAO building, and is a pleasant, large, older house whose upper floor has been modified by the NRAO to provide three comfortable bedrooms, several bathrooms, a communal lounge and a full kitchen. It is used by observers and NRAO staff visiting from other sites who will be in town for more than just overnight and who may therefore be interested in looking after themselves for breakfast, etc. It is frequently used by "computing visitors", and has proven very popular. The NRAO charges $25.00 per night, discounted to $150.00 for 7 consecutive nights. This is about half the going rate at most motels in Charlottesville.

Alden House 's very convenient to the NRAO building, but a bit of a hike from there to a choice of restaurants/cheap groceries. The observatory can usually make a car available to visitors, especially after normal working hours, however. Only catch in that is that the car does have to be available for observatory use during the day, and occasionally is used for out-of-town trips overnight. So there can be the odd occasion when it isn't available or has to be shared with another user at fairly short notice. This arrangement works out o.k. for someone at Alden House, because it's just a short walk from there to where the car is normally parked, but it could get complicated to time-share the observatory car for someone staying at my house.

If Stephen has a current driver's license and can handle driving on the wrong side of the road, he could be as independent or not as he wanted at Alden House with an observatory car for sorties into town. If not, we can probably come up with a bicycle of some sort for him.

Meal costs: in a restaurant, breakfast or lunch $4-$8, dinner $8-$15,

$1-$2 for a beer with it. Can "do for yourself" very handily and somewhat cheaper at Alden House, and we'll of course make sure he's fed at the Bridle table a few times even if he's staying in there!

re travel plans: look into flying all the way into Charlottesville. That has become cheaper than Robert will remember, and both the aircraft and the (new) airport are much larger than they were in Robert's time here. Better yet, some fares (maybe not trans-Atlantic though) are now actually less out of Charlottesville than out of Washington (a marketing trick, it makes no sense). If that doesn't work out, best scheme will be to arrange a flight to Dulles airport in Washington if possible and I will drive up there to pick him up.

I'll get back to you re dates as soon as I hear from the data analysts. I haven't anything in my schedule at the moment that would conflict with being here the last 3 weeks in November.

Cheers,

Alan

From: PAGS@phx.cam.ac.uk
To: (Alan Bridle) abridle <abridle@polaris.cv.nrao.edu>
Subject: Re: [MERLIN proposal]
Date: Thu, 22 Jul 93 16:37:32 BST

Dear Alan,
Tony Readhead has very kindly invited me to visit Caltech in January, and I am going to try to arrange leave etc. at this end to make that possible. This reminded me that you volunteered to instruct another student in the arts of primatology, and I wondered whether you would be willing to take on a somewhat geriatric student like your truly on the way back from California. Even if we get time on the VLA to observe the few Black et al. galaxies for which there aren't L-band data, it won't be till a bit later I guess, but there is quite a lot of work to do on the archival data any time. I shan't know until October, probably, whether we shall get a proper research student to work on the jet-vs-alpha stuff, but whether we do or not it would be very good for me to learn to speak AIPS reasonably fluently.

I am now writing up my Canberra talk on all this, and will send you a draft very soon. It really looks quite a clean story so far as it goes, and of course it leaves the field wide open as soon as we ask deeper questions like WHY the approaching hot-spot and neighbouring regions have a flatter alpha and WHY the longer lobe has the flatter alpha. The obvious story of contamination by a brighter hot-spot on the near side won't wash, as that would increase the surface brightness of the near-side hot-spot, but not flatten its spectrum significantly. More frequencies would help to narrow the possibilities - what chance of useful 15 GHz observations? (8GHz is clearly easier but a bit close to 5GHz.) Anyway, you'll see which way our thoughts are going when I get the draft finished.

Cheers Peter

From: abridle (Alan Bridle)
To: PAGS@phx.cam.ac.uk
Subject: Re: [MERLIN proposal]
Date: Thu, 22 Jul 1993 12:01:36 -0400

Hello again Peter,

Certainly! We would be delighted to have you visit us in the New Year. By all means plan around doing that and we can work on the details later.

I'll look at the 15-GHz sensitivity question, but you're right in that we can expect it to be tough going relative to 8 GHz.

Regards, Alan

From: PAGS@phx.cam.ac.uk
To: (Alan Bridle) <abridle@edu.nrao.cv.polaris>
In-Reply-To: <9307221601.AA14665@polaris.cv.nrao.edu>
Subject: Re: [MERLIN proposal]

Dear Alan,
Many thanks for your encouraging reply to my message re visit & tuition.
At last I sent you a draft of the written version of my talk in Canberra,
but I have accumulated a couple of worries, and will make the conclusions
more cautious in some respects. Worry no.1: on looking again at the
Garrington Conway & Leahy data on O(60) quasars & a few RG, I find a number
of sources with the jet in the longer lobe which nevertheless have a steeper
spectrum on the jet side (whereas, according to our results, both effects
should be acting in the same direction). Of course, we measure a rather
different thing, i.e. we compare alphas at a given surface brightness;
nevertheless, we obviously have to do some work on these sources. (In one
case, the jet direction is uncertain; that is 0225-01 alias 4C-01.11, ref.
Barthel et al. 1988, A+A supp. 73, 515. Do you know any better information?)
Worry no.2: I am no longer convinced that the low alphas really do extend
beyond hot-spots, and want to look closely at the spectral index distribution
to see whether the 1.4GHz beam doesn't simply make the hot-spot contribute
substantial flux to the middle range of surface brightness bins.
I wanted to get these remarks to you before the unregenerate form of
the draft reaches you through the mail!
Best wishes Peter

From: PAGS@phx.cam.ac.uk
To: (Alan Bridle) abridle <abridle@polaris.cv.nrao.edu>
Subject: Re: [MERLIN proposal]
Date: Fri, 21 May 93 16:13:12 BST

Dear Alan, many thanks for your very prompt and helpful reply. My words must have been misleading, for I certainly don't claim a TREND for the jet side to be shorter; all I intended to say is that there is NO strong trend for the jet side to be longer, and in this very small sample it's actually the other way about.
More another time Cheers Peter

From: PAGS@phx.cam.ac.uk
To: (Alan Bridle) abridle <abridle@polaris.cv.nrao.edu>
Subject: Re: [FAX received]
Date: Tue, 24 Aug 93 16:01:03 BST

Dear Alan, ta for message; submission deadline is Sept 1 - allegedly.
So I am sending the present version to Geoff Bicknell today, and will
fax him desperate messages over the next week or ten days. I hope your
distractions have been happy ones.
Best wishes Peter

From: abridle (Alan Bridle)
To: PAGS@phx.cam.ac.uk
Subject: Re: [FAX received]
Date: Tue, 24 Aug 1993 11:05:48 -0400

Peter, here are some comments on the spectral-index paper for the Oz symposium (what is title and editorship of symposium, by the way?). Overall, it's a nice. clear writeup (so it's perfectly obvious who really wrote it and I'm not sure the order of authors is appropriate!)

Main point(s):

I feel that the Introduction underplays one important point, i.e. that the quantity governing DP asymmetry itself is a function of jet prominence. The DP asymmetry is _also_ a short-side vs. long-side effect for the FR-II radio galaxies with no detected jets. It becomes the Laing-Garrington (jet-side vs. counterjet-side asymmetry) only in sources whose main jet is sufficiently prominent. This point is tucked away inside our _interpretation_ 3b (where the one word "depolarization" appears under the Liu-Pooley correlation). But it's really a _fact_ not an _interpretation_: for FRII sources without prominent jets, the lobe-averaged DP asymmetry and the lobe-averaged spectral index asymmetry are both governed by arm length (and correlate with emission line asymmetries as well). The arm-length based DP asymmetry in weak-jet sources is as convincing as the jet-based DP asymmetry in prominent-jet sources. But many people don't realize this (they remember only the Laing-Garrington effect from the literature, and are surprised if shown the data for the sample without prominent jets.)

So I'd be happier if our introduction started with:

There are three strong correlations involving differences between the two sides of an FRII extragalactic radio source:

1. In sources with prominent jets, the lobe on the side with the more prominent jet is the less depolarized.

2. In sources without prominent jets, the longer lobe is the less depolarized.

3. The lobe which is less depolarized has the flatter spectrum.

I also think it's worth reminding the reader somewhere that the geometry proposed for the Laing-Garrington effect can overcome any intrinsic depolarization asymmetry once the source is turned sufficiently close to the line of sight. This allows the DP asymmetry to "switch" from being length-based to being jet-based, as you leave the plane of the sky, by geometry alone. Our "problem" is to explain why there is a similar switch-over in the spectral index asymmetry even though geometry cannot account for it in the same way (if the spectral index is unmodified by the medium). As Figure II hints at an answer (based on the surface brightness segregation of the spectral asymmetry), this might best come in where we introduce Figure II?

Small points:

I'd sooner not describe the correlations as "very strong". "Strong" seems strong enough to me!

At end of introduction we say "The obvious way to decide ..." I'd sooner say "An obvious way ...." There are others, including comparing all the asymmetries in FRII sources with and without prominent jets.

The third sentence in the "published evidence" paragraph has met with a nasty accident that lopped off its ending.

On the FAX, I can't distinguish the symbols for Jetted side and Counterjetted side in Fig.1 at all. I'm presuming this is a line-width problem, but is it clear enough on the original?

How was "lobe length" defined for Fig.II? Was it "distance from optical object to furthest emission conceivably associated with lobe"? Probably we should say so explicitly, where we introduce Fig.II

B et al. reference should be Bridle, A.H., Hough, D.H., Lonsdale, C.J., Burns, J.O. and Laing, R.A. 1993, to be submitted.

In acknowledgements: "the 5 GHz images", not "that 5 GHz maps". Also "under a co-operative agreement with the National Science Foundation", not a "contract" (this matters to our legal beagles).

Throughout: we've mixed the term "map" and "image", "mapping" and "imaging" using both in places. Could we standardise (my own preference being for "image", having been part of the campaign for radio imaging to use the same terminology as the rest of science!).

Cheers, Alan

From: abridle (Alan Bridle)
To: pags@phx.cam.ac.uk
Subject: 0225-01
Date: Tue, 24 Aug 1993 11:28:45 -0400

Hello yet again Peter,

I've followed up your question re the jet side in 0225-01, and there's a 4.9 GHz observation in a paper by Lonsdale, Barthel and Miley submitted ApJSuppl in Jan 1993 (may be out by now) confirming that the excrescence to the NW of the core on the older image is real. It now looks like an elongated knot that has a good chance of being a jet at higher resolution but would not pass the 4:1 test just yet. They also show a 14.9 GMz contour plot but this is too core-dominated to show any more than just a hint of the jet candidate.

I would not worry about taking the NW lobe as the jetted one, this is almost certainly correct based on the present data.

A.

From: PAGS@phx.cam.ac.uk
To: (Alan Bridle) abridle <abridle@polaris.cv.nrao.edu>
Subject: Re: [FAX received]
Date: Wed, 25 Aug 93 16:26:03 BST

Dear Alan,
many thanks for your comments and corrections; I've copied both e-mails to Robert Laing, but he's away till around Sept. 8th in GOC (Tucson, I think).

One query: please can you give me the canonical references for
2. In sources without prominent jets, the longer lobe is the less depolarized.
If I put in a statement like that without the proper references, there'll be no end of hassle.

Stephen Turner has written his thesis, and, while he claims with the usual and inevitable straight face, that none of this work was done in collaboration, you and Mary figure most prominently in the Thanks.

Cheers Peter

From: PAGS@phx.cam.ac.uk
To: (Alan Bridle) abridle <abridle@polaris.cv.nrao.edu>
Subject: Re: [FAX received]
Date: Tue, 31 Aug 93 14:58:54 BST

Dear Alan,
I've been thinking about your comments, for which many thanks. I've incorporated all the small corrections (including "image" everywhere, but I've avoided "imaged" and other such horrors even at the expense of longer sentences). I have some difficulty with your main point, though, if it means putting in correlations 1., 2., 3. literally. That is a good and clear statement, and we should certainly do somethong like that in the proper paper, but it's not what I said, and I can't help feeling that the conference write-up ought to bear some resemblance to what I said even if that wasn't the best thing to say. Also, this article focuses upon the spectral index asymmetry, and deals with depolarization only in passing.Would you be content with a sentence added to 3b, after
...chiefly of radio galaxies. "Specifically, Pedelty et al. showed that, in sources without prominent jets, the longer lobe is the less depolarized." (By the way, it eventually dawned on me that Pedelty et al. is the reference I asked you for!)

Regarding the definition of lobe length: We took it as the distance from the nucleus to the furthest part of a 3sigma contour, NOT the distance to a hot-spot. This makes little difference in most cases but is crucial in 3C249.1! I propose to add this definition to the caption for Fig.2; I had originally decided to put off such details till the proper paper, but I guess you're right.

On a different matter: you very kindly encouraged me in the idea of visiting Charlottesville after Caltech. Still slightly hazy plans would end my visit there on 20th Jan; would a couple of weeks following that date be convenient for you?

Now I'll try to put into Latex what I have just claimed I had "done"; meanwhile, best wishes

Peter

From: abridle (Alan Bridle)
To: PAGS@phx.cam.ac.uk
Subject: Re: [FAX received]
Date: Tue, 31 Aug 1993 12:32:28 -0400

Hello Peter,

You make an excellent point that the written version should not go too far beyond what was actually said at the meeting. Your suggested compromise is fine by me.

I'm also happy with the lobe-length definition, and yes we should spell it out. Other people have used hot spots, centroids of lobe "components", model fits of various kinds, etc., so it's important to say which was used.

And 20 January + would be just fine for you to visit us. It's not a time of year that has Virginia at its finest, of course, but the face of an AIPS terminal looks much the same at any time!

Cheers, A.

From: abridle (Alan Bridle)
To: PAGS@phx.cam.ac.uk
Subject: Re: [FAX received]
Date: Tue, 31 Aug 1993 14:06:48 -0400

Hello again Peter,

Just got your FAX with the revised version of the paper text, which is o.k. but for fact that J.O. Burns is still missing from the reference to Bridle et al. Please insert him just before Robert Laing! (He's a bit sensitive about being left out)...

Ta,

A.

From: PAGS@phx.cam.ac.uk
To: (Alan Bridle) abridle <abridle@polaris.cv.nrao.edu>
Subject: Re: [FAX received]
Date: Tue, 19 Oct 93 10:51:00 BST

Hello Alan!
I am now booked to come to Charlottesville on 18th Jan and dep. 1st Feb.; hope that's OK. Can you advise me on what I should do about booking accomodation?

I trust the diagrams arrived; anyway the MS is now with Bicknell. Just now I'm trying to enthuse a student to join in the next stage. Thanks also for the message re MERLIN observations.

Cheers Peter

From: abridle (Alan Bridle)
To: PAGS@phx.cam.ac.uk
Subject: Re: [FAX received]
Date: Tue, 19 Oct 1993 11:52:45 -0400

Hello again Peter,

Thanks for the dates, which will be just fine. I'm looking forward to your visit.

Would you like to give a colloquium while here?

Re accommodation: we have loads of room at our house, and you're welcome to stay with us. We can give you your own bedroom, bathroom and study for the duration if you don't mind being in our basement (the bedroom has full windows but the study is partly below ground and has only high ones). Only disadvantage is that we're 8 miles out of town so you would be a bit constrained re traveling in and out independently unless we organize a car for you. The observatory may be able to help with a car after hours on occasions, and I have an older one that you could use for the duration - but it's not the most reliable in the world. Riding in and out to town with me and/or Mary would work most of the time, though. (The upside of the arrangement is that we are in a quiet wooded area with some pleasant walks, views etc.) We do have two cats, which I've learned to mention to our possible house guests in case they're hyper-allergic to friendly furballs!

Alternatives are:

Alden House: a few minutes' walk up Observatory Hill from NRAO, an old house whose upper level has been converted into several independent bedroom/bathroom sets with a shared lounge and kitchen, and is rented out to visitors by NRAO at $25/night. The lower part of the house is rented to astronomy graduate students. Its advantages over a hotel are that it's convenient if working late at NRAO, you can make your own meals etc, and its cheaper. It disadvantage is that it's not easy walking distance to any shops. NRAO can loan a bicycle or a car after hours to Alden House visitors, though.

Cavalier Inn: closest hotel to NRAO (about 15 min walk) and within walking distance of a large shopping center and several smaller ones. NRAO gets a (reduced) rate of $45/night if it makes the booking. There is a Chinese restaurant in the Cavalier Inn and a pancake house (breakfast place) adjacent.

Finally, some combination of the above, e.g. stay with us a while, do a stint in Alden House or the Cavalier if you'd like a little more privacy/independence for some of the time. But please don't feel you'd be imposing by staying with us, we enjoy having visitors and our house is well suited to this. Both Mary and I have had colleagues stay with us for weeks at a time before, and you can check the arrangements out with Robert if you're dubious as he's been of them!

Either Alden House or the Cavalier Inn would be booked through NRAO, i.e. just tell me the dates you'd want. Cavalier could be paid by a credit card, Alden House is "cash-on-departure" (travelers' cheque would be best way to do it).

Yes, I received the diagrams o.k., thanks. Good luck attracting the student, it always helps to have somebody full-time on these things.

Cheers, Alan

From: PAGS@phx.cam.ac.uk
To: (Alan Bridle) abridle <abridle@polaris.cv.nrao.edu>
Subject: Re: [FAX received]
Date: Fri, 22 Oct 93 10:24:49 BST

Dear Alan, many thanks for your most hospitable message! I accept your invitation with enthusiasm. Boris ans Zoe (our two cats) send their greetings.
Best wishes to you all Peter

From: PAGS@phx.cam.ac.uk
To: (Alan Bridle) abridle <abridle@polaris.cv.nrao.edu>
Subject: Re: [FAX received]
Date: Fri, 12 Nov 93 13:09:47 GMT

Dear Alan,
I now have a student again - and a real one this time!
She will be working on the extension of the jet-alpha project to radio
galaxies, but there's also more analysis to be done on the quasar sample;
in particular, for a start, I want to make sure that the flat spectrum
on the jet side bit is not just due to a boosted compact hot-spot that
is thoroughly unresolved on the 20cm images. Now Stephen left an exabyte
with the 20cm images on it, but I think it was last in Robert Laing's
possession, and I was unable to contact him just before he went off to
the USA. I have e-mailed him (he says his e-mail will be accessible from
wherever) but if all else fails, would you be able to send me copies
of the 20cm images (which I presume you still have)?
Apologies for making yet more work for you!
Cheers Peter

From: abridle (Alan Bridle)
To: PAGS@phx.cam.ac.uk
Subject: Re: [FAX received]
Date: Sat, 13 Nov 1993 19:55:19 -0500

Hi Peter,

I'm in Socorro at the moment (with Robert!). I believe I have copies of all the relevant 20cm images in Charlottesville. I may also have most of the uv data there (I'll check that as soon as I get back -- but that is not until second week of December, I'm on a long trip West at the moment).

How soon do you need the images? I think many of them are still on my workstation disk in C'ville and I can probably grab them from out here over the net and make a tape of them here.

Glad to hear about the new student. Should really help to keep the momentum on this project!

From: abridle (Alan Bridle)
To: PAGS@phx.cam.ac.uk
Subject: Colloqiumnwhile in CV?
Date: Fri, 10 Dec 1993 15:43:36 -0500

Peter,

As I mentioned once before, we'd be delighted if you could give a colloquium on the topic of your choice while you are here. I've had Jim Condon keep our colloquium slot for January 27th open in the hope that you would like to do so.

If you would indeed like to do this, NRAO could reimburse you for half your air fare (on the basis that it would be sharing your fare with whoever is funding your stay at Caltech) up to a limit of $500. It would also pay you a personal honorarium of $75. (Normally the $500 is our guideline for covering fares and local expenses but as you're staying at our house and won't incur the usual local expenses we could apply all of NRAO's contribution to covering up to half your fare).

Just let me know a title for your talk if you want to do this.

Cheers, Alan

From: PAGS@phx.cam.ac.uk
To: (Alan Bridle) abridle <abridle@polaris.cv.nrao.edu>
Subject: Re: [Colloqium while in CV?]
Date: Sat, 11 Dec 93 14:36:59 GMT

Dear Alan,
yes, I'd be happy to give a colloquium, but may I put off sending a title till we get to the USA, if we get to the USA? Trouble is, most of the past two weeks have been taken up with worrying over visa problems rather than getting on with quasi-scientific preparations that I'd hoped to concentrate on the moment Michaelmas Term finished. The possibilities are (i) the stuff you & I have been working on - which I plan to serve up again at Caltech, with very minor updates so far - but which would be ultra-boring for you (ii) a closer look at the Adam Black et al. sample; Adam & I (actually mostly me, as Adam is now a publisher on the staff of CUP) are about to submit a paper on the general trends discernible in that sample of relatively low luminosity FR2s. This is looks the most probable at the moment. The third possibility is still at a very preliminary stage & I doubt whether it will be far enough advanced by the time I get to Charlottesville.

Cheers Peter

From: PAGS@phx.cam.ac.uk
To: (Alan Bridle) abridle <abridle@polaris.cv.nrao.edu>
Subject: Re: [MERLIN proposal]
Date: Thu, 03 Feb 94 13:59:47 GMT

Dear Alan,
Sitting on the 'plane, I became increasingly impressed with your idea
for looking at grav. shearing via polarization, and also with the fact
that there is probably enough data on our quasar sample already to
make a modest start - tho' BCD at 8GHz would clearly be helpful in
removing rotation more cleanly than one could with the two L-band IFs.
This led on naturally to the thought that you are probably doing this
job already! Are you? I am really sending this message to say that if
you haven't done it yet, it is worth thinking about very seriously, as
I believe onn could get significant detections or upper limits this way.

Thank you again for your tremendous hospitality, and course of instruction
for small primates.

Regards Peter

From: abridle (Alan Bridle)
To: PAGS@phx.cam.ac.uk
Subject: Grav. shearing
Date: Thu, 3 Feb 1994 11:24:27 -0500

Hi Peter,

Glad to hear you're back safely, I presume the return was
much less traumatic than your arrival in Virginia!

No I have not yet derotated our quasars, and this is something that
could now be done at the L-band resolution. Robert and I both have
the RM maps from which to do this. They were made from L Band to C
Band (we do not have X Band at all for these sources, though Dave
Hough snapped a few of them there in a phased-array VLBI experiment).
This might be enough data from which to make a start, but I had not
pursued the point because I felt that sensitive high-resolution
imaging of higher-redshift objects would be the way to go for a
systematic study of the matter.

The best data for the purpose may come out of the Barthel/Lonsdale
hi-z sample. I'll ask Colin if he's thinking of that as a test for
lensing. I believe he may be, as we discussed the issue for 3C9 in the
"counterjet sample" paper and wrote a couple of sentences about it
in there.

On another point, I asked Bob Brown about the NRAO policy for bringing
students into our predoctoral fellowship program for shorter lengths
of stay than the canonical two years, e.g. for a summer. He was very
encouraging about that, provided someone on the NRAO staff has agreed
to "look after" the student and provided the visit is for something
more substantial than just an observing run (i.e. for several months
not several weeks). So if you and Jane think it would be productive,
I am certainly willing to host her for a visit that could include a
stay at the AOC and an extended data-reduction push here in
Charlottesville. If we do that, the NRAO would pay her a stipend
while she was in the program and I can probably talk them into paying
her travel for a trip to the AOC from Charlottesville, but her travel
to Charlottesville would have to be funded from your end.

Anyway, the option is definitely there if you do think it would be
useful nd good experience for her ....

We enjoyed having you visit us, and hope you'll come at a better time
of the year next time!

Cheers, A.

From: abridle (Alan Bridle)
To: pags@phx.cam.ac.uk
Subject: VLA Observing Logs?
Date: Thu, 3 Feb 1994 15:09:51 -0500

Hi Peter,

I seem to have misplaced some VLA operators' logs that I left beside the "ringtail" computer while you were here. I am wondering if by any chance they found their way into your paper stack when you tidied up to leave Charlottesville. There are three sets of logs from the operator logs from the VLA, all for project AB532, and all from 1989/90. I wonder if you could do a quick check of the papers you picked up from the AIPS user room and see if you acquired these by mistake?

If so, I'd be grateful if you could FAX copies of them back to me.

Cheers, A.

P.S. Your copy of the 3CR quasar paper is following you home by mail!

From: PAGS@phx.cam.ac.uk
To: (Alan Bridle) abridle <abridle@polaris.cv.nrao.edu>
Subject: Re: [VLA Observing Logs?]
Date: Tue, 19 Apr 94 15:55:30 BST

Hello Alan!
Greetings! I hope the dogwoods are flowering/ are about to be having been flowering/ and that the poison ivy is having a hard time. Spring somewhat delayed here owing to corruption in high places.
While I was enjoying your hospitality you mentioned the further possibility of getting Jane D-T. to NRAO for a little while. It seems that we now have observations of 403 etc. scheduled for mid-June; Robert thinks he might be near Socorro at the time, and so that might be a good time for Jane to visit. Is that within the realms of possibility? If so, please advise on what we ought to do next from this end of the world.

Best wishes to you & Mary Peter

From: abridle (Alan Bridle)
To: PAGS@phx.cam.ac.uk
Subject: Re: [VLA Observing Logs?]
Date: Tue, 19 Apr 1994 12:13:13 -0400

Hi Peter,

Indeed the dogwoods are glorious at the moment, the best display we have seen in many years. Winter and the ice-pack seem very long ago and far away and the poison ivy has yet to emerge ....

Since we last talked about this, I have tied myself down a bit by arranging to have a summer student (undergraduate) here in C'ville who is starting at the end of May. That means that I won't be able to go out to Socorro in mid-June for the observing run itself as I'll barely have time to get him started before our observing comes up, and I'll be away for a while later (see below)..

If Jane wants to go to New Mexico for the observations, rather than do them remotely, she must be accompanied by an expert the first time (that's an NRAO rule for beginning grad students). So that will work out o.k. if Robert could indeed be there with her.

After the observing, she would be very welcome indeed to come to Charlottesville to work on the data. I asked Bob Brown about the rules for less-than-a-full-NRAO-fellowship (2-years) graduate students and he was encouraging. I think there are no _formal_ rules provided there is an NRAO staff member who is going to supervise the visit, except that there's a working lower limit of a few weeks (that is intended to deflect requests for NRAO support for every student on every observing run!) I got the impression that a request for support for a month or two would be received favorably, however.

A logistical constraint is that I will be away for the last week of July and the first two of August (another reason why I can't disappear to Socorro also in June). One option might therefore be for Jane to go to Socorro with Robert, then come to C'ville for about a month while we do as much of the imaging as possible with all the data that is in hand. Then she might head home about the time I leave? Of course, if she wanted to stay longer, we will be looking for a house and cat-sitter while we're away ....

Anyway, the first thing is to think around the time constraints and figure out how long a visit will make sense from the point of her getting things done. If you still think it's a good idea I'll talk some more details with Bob Brown, who handles the student budget. I don't think it will take much to arrange the purely-NRAO part of it, but there will probably be some visa paperwork if we pay her a stipend while she's here and that might need some fast moving on our part.

Mary is in London at a conference this week, so don't be altogether surprised if she gives you a call. She's going to Ireland right after it to spend some time with her parents but she may have a day spare at the end of that visit before she flies home. She's a great one for last-minute itineraries, so anything is possible!

Cheers, A.

From: abridle (Alan Bridle)
To: pags@phx.cam.ac.uk
Subject: Workshop
Date: Mon, 20 Jun 1994 09:20:27 -0400

Hello Peter,

I have passed your message on to Phil Hardee. I'm delighted to hear that you may now be able to join us and that we won't have to contend with two meetings on similar topics almost on top of each other.

I expect you'll hear from Phil soon but let me also complete the loop by giving you his email address. It's

hardee@venus.astr.ua.edu

Cheers,
Alan

From: abridle (Alan Bridle)
To: PAGS@phx.cam.ac.uk
Subject: Interference
Date: Tue, 25 Oct 1994 00:32:00 -0400

Hello Peter,

Thank you for the FAX, we had just caught the interference problem from inspecting the data themselves and from the written operator logs. It was quite short-lived and has been relatively easy to edit out.

Jane is doing pretty well with calibrating and self-calibrating the 3C135 and 3C403 data. We have discovered that both sources have particularly rich confusing fields at 20cm with other doubles well inside the primary beam. Will require making larger maps than we otherwise would have used, or multi-field MX's, but no extra problem in principle.

I also talked Rick into sending us a tape with all of Adam Black's data that had been left at the AOC, including the full set of all configurations on 3C111, and the "missing" data on 3C403F, at 8 GHz. This was distilled from 24 tapes in Rick's office, Jane's arrival here was a good excuse for E-nagging him into going through them and shipping the data at last!

That is all the good news. Unfortunately I had some bad news as we learned this week that Mary is need of some major surgery. This will have to be done in the next few weeks. As there will be a significant recuperation period once she is back home from the hospital I can't guarantee that I can go out to New Mexico with Jane as we had originally planned. So her trip to the AOC may depend on whether Robert can make it out there. I've been in touch with him about this and he hopes he will be able to make it. He will try to let us know in the next day or two. If he can get there, we will arrange to for Jane to fly out to NM and he will meet her there. If not, and if I still need to be here by the time of the observing run, it will be quite o.k. for Jane to stay here in C'ville the whole time. We can have the tapes from the observing run sent here by overnight courier and no matter how the details turn out sheushould be as far along with reducing the data had been planned. But possibly without the experience of visiting the telescope. I will let you know more as soon as the details fall into place.

Cheers, Alan

From: PAGS@phx.cam.ac.uk
To: (Alan Bridle) abridle <abridle@polaris.cv.nrao.edu>
Subject: Re: [Interference]
Date: Tue, 25 Oct 94 11:03:03 GMT

Dear Alan,
I felt suddenly shattered by your news, so heaven only knows how you must feel. My very best wishes to both of you for a thorough recovery and a return to the vigorous life you are used to - without undue haste, of course. I'm sure you will look after Mary well.
Regards Peter

From: abridle (Alan Bridle)
To: PAGS@phx.cam.ac.uk
Subject: Re: [Interference]
Date: Tue, 25 Oct 1994 09:44:37 -0400

Hello Peter,

Thanks for your note, and I will certainly give Mary your best wishes. It is a rather nervous time for us both but we have every reason to hope for a good long-term outcome.

Cheers, Alan

From: pags@mrao.cam.ac.uk (Peter Scheuer)
To: abridle@edu.nrao.cv.polaris
Cc: pags@mrao.cam.ac.uk
Subject:
Date: Sat, 18 Feb 1995 15:26:05 +0000 (GMT)

Dear Alan,

It's a long time since we communicated, and I do hope that Mary is progressing well. Please forward my greetings & good wishes to her.

On quite a different subject: I am keen to get the observational side of the jet-side versus spectrum story written up as a proper paper, now that we have all of the sample we originally set out to measure. Jane D-T seems to want to add a lot of theoretical discussion - which, inevitably, is taking time, as it's a kind of work she hasn't looked at for some time. She also claims that you thought it should not be published yet, and I'm don't know why. If we leave it much longer, our collective memories of the small but important detail will fade, so I'm anxious to know (a) whether you are really against writing a paper now and (b) if so, what you think we need to wait for.

Regards Peter

From: abridle (Alan Bridle)
To: pags@mrao.cam.ac.uk (Peter Scheuer)
Subject: Re:
Date: Tue, 21 Feb 1995 11:09:18 -0500

Hi Peter,

Mary is doing quite well again thanks. We had a very bad time in january when she had to have a second operation but she is properly on tte mend this time and feeling much stronger. She hopes to start back at work part-time in March. Fortunately we have had a much milder winter and she has been able to get out for walks and enjoy her time at home.

I do recall having one talk with Jane re writing up the spectral asymmetries. As I remember it, she was wondering about waiting for the RG results before writing it all up, as that might make a stronger paper.

My feeling was that this was a reasonable _option_ given that the quasar result had been announced. We discussed the tradeoffs between her being involved in an "early" publication and having her first publication be a more complete discussion of the asymmetries. I did not mean to come down hard on the side of waiting, just to validate her own question about there being two sides to the issue of "fast publication" versus "fuller discussion of a larger sample and its meaning". I did not want to discourage her from _thinking_ about the tradeoffs at this point. Sounds like I might have overdone that somewhat if she interpreted me as being _against_ publishing now.

I have no objection to writing up the quasar results on their own if that is what you and Robert prefer. There is certainly a case for publishing the result as an intriguing observation, regardless of its eventual interpretation. And it may be useful to link it with the properties of hot spots that appear to correlate with jet side. There is clearly a puzzle here and it may be some time before the RG data and/or modeling help us to answer it.

From: pags@mrao.cam.ac.uk (Peter Scheuer)
To: abridle@polaris.cv.nrao.edu (Alan Bridle)
Subject: Re: recovery
Date: Tue, 21 Feb 1995 17:56:54 +0000 (GMT)

Dear Alan, I'm delighted to hear that Mary is now doing well; the fact that she's thinking of going back to work next month may not show great wisdom but it sure is an encouraging sign.

Will email you again when I've had further discussion with Jane D-T. Since returning she has got herself bogged down in excessively ambitious schemes for modelling the synchrotron ageing, on the lines of Blundell and Alexander; I've let her go this way for a while so that she can convince herself it ain't on, before starting to persuade her (yesterday) to try something simple with an admixture of observational and fluid simulation data.

Cheers Peter