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April 3, 1975

Dr. A. H. Bridle Box 2 Green Bank West Virginia 24944

Dear Alan:

Thanks for your letter and list of galaxies. I was glad to meet you again, and also to meet Dick and Bert. We hope the observing is (has) doing (gone) well. We already have some information on some of your galaxies, as follows:

00 5 5+300:	Marie-Hélène Ulrich gives V_{\circ} =5010 km sec ⁻¹ in a paper to be published (redshifts for a sample of E galaxies in the Bologna identifications - you could ask her for a copy).
0111+021:	we settled on z=0.0470 finally.
0504+030:	this is definitely a QSO, in the Lynds+DW unpublished sample.
1126+101:	QSO (z=1.515, Ap. J. <u>190</u> , 509, 1974).
1626+396:	z=.0303, not .033 (copying error?) (Mrs de Vaucouleurs pointed this out!)
1645+174:	z=0.314, a galaxy (Ap. J. <u>190</u> , 271, 1974).
1652+398:	z=0.0335 (Ap. J. <u>190</u> , 271, 1974), also note in proof in Ap. J. (Letters), <u>189</u> , L99.
2201+044:	z=0.0281? This is a difficult one. On most of our spectro- grams it is continuous, but on others there is apparently H- alpha emission and G-band + Na D absorption. It may be another 1652+398 i.e., almost continuous spectrum, depending on just which part of the galaxy one observes.
One	object which might well have been in your list is 02 -252 (2331-240).
Andrew et	at (PASP 85, 87) call it a USU with a "wide emission band". A $\frac{1}{12}$
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Tsthis Heme emission band' is 5007 Angstroms (sharp on our spectrograms) - the redshift is 0.0477. Just in case you'd like to do it (the radio spectrum implies very small size), the 1950.0 position (0".5 rms) is

R.A. = 23 31 17.92 Dec. =-24 00 15.7

While Olll+O21 is obviously a galaxy, we are less convinced by the other Brandle and Bridie 'deviant galaxy' 1635-03. Of course, your position is only 15", but the object you marked looks red and stellar to us, and should be a QSO from the radio spectrum. We bet the redshift is either exactly zero or more than 3, and will try for it next week. On the subject of your other identifications we think, but **ove** not sure, that we mentioned that 0422+00 and 0829+04 are both continuous spectra and presumably OK identifications. The 4C04.49 thing is a star (unless Lynds and DW set on the wrong object) - but your position is not an accurate one so guess there's no cause for panic. If you get a better position and it still falls near the 'star', we'll try it at McDonald.

Optical colours (esp. nuclear colours) may be useful to try and figure out what's happening in your galaxies - (actually, a comparison of colour with radio luminosity or size of the nuclear component). If we could manage time to do it, it would be interesting - but also someone else may have more time for this (Sue Simkin?).

Best wishes to you and Mary,

Derek, to

Derek and Bev Wills

D&BW/dl

P.S. Its 70° here; hot n'ubb for y'all, eh? Enjoy Holland and Westerbork!