1064-03-298 Andrew Edwin Marcus Lewis* (andy@aemlewis.co.uk), Department of mathematics, Leeds, LS29JT, England. The search for natural definability in the Turing degrees.

While the definability of all jump classes other than low has been established by Nies, Shore and Slaman through coding techniques, there remains a conspicuous lack of any natural definability results in the Turing degrees – I shall detail the state of affairs in a program which looks to address this issue by systematically analyzing the order theoretic properties satisfied by the degrees in the various jump classes. (Received September 13, 2010)