1016-58-265Alejandro Uribe* (uribe@umich.edu), University of Michigan, 2074 East Hall, 530 Church
Street, Ann Arbor, MI 48109-1043. Manifolds of compatible almost-complex structures and
geometric quantization. Preliminary report.

Consider a compact, pre-quantizable symplectic manifold (X, ω) . In this talk I will discuss relationships between the geometric quantization of X, and the symplectic geometry of manifolds of compatible almost-complex structures. In the non-integrable case, "geometric quantization" will be defined in terms of a rescaled Laplacian on sections of a pre-quantum circle bundle (almost Kähler quantization). Several of these results are joint work with T. Foth. (Received February 13, 2006)