## 1050-57-21 Tim Perutz\* (perutz@math.columbia.edu). Lagrangian sphere-bundles.

Lagrangian correspondences between symplectic manifolds are the "maps" of symplectic geometry. They make good boundary conditions for pseudo-holomorphic curves. Lagrangian correspondences that are sphere-bundles (especially circle-bundles) are notable both for their geometric prevalence, and for the interesting structure of their Floer homology theory, one of whose features is an analogue of the Gysin sequence from algebraic topology. (Received January 05, 2009)