1019-53-160 **Chris Wendl*** (wendlc@math.mit.edu), MIT, Department of Mathematics, 77 Massachusetts Avenue, Room 2-169, Cambridge, MA 02139. *Low-dimensional symplectic field theory and holomorphic foliations.* Preliminary report.

Symplectic Field Theory is a framework for defining invariants by counting holomorphic curves in symplectic cobordisms. In four dimensions, such curves have special properties, e.g. there are algebraic controls over embeddedness and intersections. We outline some work in progress to define a distinctly low-dimensional version of rational SFT for contact 3-manifolds M, by counting holomorphic curves in $\mathbb{R} \times M$ that have embedded projections to M. These have very nice analytical and geometric properties: in particular, they yield geometric decompositions of the manifold via J-holomorphic foliations. (Received August 14, 2006)