1059-32-178 Mirroslav T Yotov* (yotovm@fiu.edu), 11200 S.W. 8th Street, DM 339B, Miami, FL 33199.

Spaces of holomorphic forms on Riemann surfaces of hyperbolic type.

The talk is based on a joint work with F. Bogomolov (CIMS) and F. Soloviev (CIMS). We study the existence of complex structures on a Riemann surface which make certain subspaces (of dimension less than 4) of smooth complex forms holomorphic such. (Received February 22, 2010)