Stefano Vidussi* (svidussi@ucr.edu), Department of Mathematics, University of California Riverside, 900 University Ave, Riverside, CA 92521. Virtual Betti numbers of 3-manifolds and symplectic 4-manifolds with K=0.

In this talk I will summarize some results concerning the classification of symplectic 4-manifolds with trivial canonical class. I will discuss the fact that when, by dimensional reduction, the study of these manifolds can be reduced to the study of (closed, oriented) 3-manifolds, it is possible to prove some standard conjectures of symplectic topology by using old and new results on the virtual Betti numbers of 3-manifolds. This is joint work with Stefan Friedl (Received March 10, 2008)