## Orbifold techniques in degeneration formulas

DAN ABRAMOVICH AND BARBARA FANTECHI

In memory of Eckart Viehweg

**Abstract.** We give a new approach for relative and degenerate Gromov-Witten invariants, inspired by that of Jun Li but replacing predeformable maps by transversal maps to a twisted target. The main advantage is a significant simplification in the definition of the obstruction theory. We reprove in our language the degeneration formula, extending it to the orbifold case.

Mathematics Subject Classification (2010): 14N35 (primary); 14D22 (secondary).