Morse type theories with differential graded coefficients

## Mihai DAMIAN<sup>1</sup>

 $^1$  Strasbourg

Motivated by questions on the existence of contractible periodic characteristics on some hypersurfaces of the cotangent bundle, we develop a general Morse theory with coefficients in a differential graded module over the ring of singular chains of the based loop space. This generalizes previous works of JF. Barraud and O. Cornea. Joint work with JF. Barraud, V. Humiliere and A. Oancea.