THE FIELDS INSTITUTE

ABSTRACTS 1.2

FOR RESEARCH IN MATHEMATICAL SCIENCES

BERNHARD KELLER University Paris 7

A-infinity-Yoneda algebras via twisting cochains: an example (25-30 min)

Since H. Cartan's seminar in the nineteen fifties, twisting cochains have been used to describe complexes computing the homology of fibred spaces. We adapt a result from this classical theory to obtain a means of recognizing the A- infinity structure on the Yoneda algebra of an augmented graded algebra. We apply this to R. Berger's N-Koszul algebras (discoverd independently by E. Green, E. Marcos, R. Martínez and Pu Zhang).