

Givental's non-linear Maslov index on lens spaces

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Givental's non-linear Maslov index is a quasimorphism on the universal cover of the contactomorphism group of real projective space (with its standard contact structure). It has been constructed in 1990, and since then it has been used by several authors to obtain applications to contact rigidity phenomena (orderability, existence of translated points, unboundedness of bi-invariant metrics on contactomorphism groups, non-displaceability of pre-Lagrangian toric fibres, ...). In this talk I will review Givental's construction and its applications, and present a generalization to the case of lens spaces.