

Scale-invariance and higher order derivative terms in modified gravity theories.

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1 Plans for disseminating the findings of this research

To ensure that the outputs obtained in the research are properly disseminated, the idea is to implement multiples activities. They include:

- publications in specialized journals;
- participation in congresses and conferences;
- giving lectures and seminars at ITA Physics Department;
- insertion of topics related to the outputs from the research in the postgraduate course “Topics in Cosmology”;
- advising graduate students of the postgraduate program in the topics of this research.

Related to the last topic above, the idea is to prepare students for spending part of their postgraduate studies in the University of Trento, performing research activities in a rich academic environment. This shall increase and strengthen the international collaboration.

In a long term perspective, it is well known in ITA, that several (engineering) undergraduate students take courses of the Physics postgraduate program. The idea of teaching some advanced topics for these students is to create a solid conceptual basis in cosmology, where they can learn how to analyze cosmological models and how to perform data analysis. With these skills, the future engineers may be able to engage in international scientific collaborations and space missions that are planned for the next decades (e.g. Euclid, James Webb Space Telescope, SPHEREx, eROSITA, etc.).