Contribution ID: **102** Type: **Talk**

Precision constraints for dark energy and modified gravity

Thursday, 5 September 2019 14:55 (25 minutes)

I will present current observational bounds on general Horndeski scalar-tensor theories of gravity, using data from the Planck, SDSS/BOSS and 6dF surveys. Using such theories as an example, I will also show how combining these observational bounds with insights from theoretical particle physics (e.g. stability criteria and positivity bounds) can drastically improve constraints and therefore allows us to test gravity with unprecedented precision.

Primary author: NOLLER, Johannes (ETH Zurich)

Presenter: NOLLER, Johannes (ETH Zurich)

Session Classification: Parallel Sessions: Modified Gravity and Dark Energy (C.A.R.L., H03)

Track Classification: Modified Gravity and Dark Energy