R^3B Experiments with Final CALIFA Setup

The R3B (Reactions with Relativistic Radioactive Ion Beams) experiment, as part of the large research facility FAIR in Darmstadt, enables kinematically complete measurements of reactions with high-energy radioactive beams. The broad physics program offers an unique possibility to gain a deep insight in the nuclear structure and dynamics of exotic nuclei far off stability.
In this talk I will focus on the S444 experiment in 2020 with stable incoming 12C beam. A major reaction channel of interest was the quasi-free scattering 12C(p,2p)11B with the detection of the two outgoing protons by the CALIFA calorimeter.
Being a key detector of the R3B experiment it serves for the detection of gamma-rays as well as protons and other light charged particles in the target area. As the development of this detector, with a strong contribution from the TUM group, is going to its final setup I will give you an overview of the current updates and final configuration options.