

## PHYSICS AND ASTRONOMY

## SPECIAL COLLOQUIUM (In Person & Online)

**Prof. René Reifarth** Goethe Universität Frankfurt

## "Where do we come from - rings might have the answer"

## <u>Abstract</u>

"Virtually all of the isotopes heavier than iron would not exist without neutron-induced reactions. Despite their importance in many different astrophysical scenarios, there are almost no direct measurements for isotopes with half-lives shorter than a few years. A radically new approach is necessary to overcome this constraint. A combination of a free-neutron target and an ion storage ring can bring the half-life limit down to fractions of a minute. I will review different astrophysical scenarios, status of current experiments as well as prospects of this new experimental endeavour."

> Thursday, November 3, 2022 2:30 p.m. PDT Elliott Building 060

Zoom link available on Uvic Event Calendar