

# Department of Theoretical Physics

## Free Meson Seminar

<i>Speaker</i>	:	Andrew Lytle
<i>Topic</i>	:	$K \rightarrow \pi\pi$ decays
<i>Topic</i>	:	from lattice QCD
<i>Day, Date &amp; Time</i>	:	Thursday, May 16, 2013 at 2:30 p.m.
<i>Place</i>	:	AG 69

### *Abstract*

The Standard Model predictions for CP-violation in the kaon system require precise theoretical control of  $K \rightarrow \pi\pi$  hadronic decay amplitudes. I will explain and report on the status of physically realistic, from-first-principle QCD calculations of  $K \rightarrow \pi\pi$  decays being carried out by the RBC and UKQCD collaborations. These are the first realistic ab-initio calculations of a fully hadronic decay.

*(Nilmani Mathur)*