

## Colloquium

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### GLOBAL STABILITY FOR THE EINSTEIN–KLEIN–GORDON EQUATION

Friday, October 26, 2018

3:00 p.m. in ES-143

(tea & coffee at 2:30 p.m. in ES-152)

**ABSTRACT.** We consider small perturbations of the Minkowski space for the Einstein–Klein–Gordon equation with initial data with slow decay and show some form of modified scattering. This reduces to a small data/global existence problem for a coupled system of quasilinear wave and Klein–Gordon equations. The nonlinear stability was studied earlier by Q. Wang and Lefloch–Ma, but the case of slowly decaying data leads to some additional complications.

This is joint work with A. Ionescu.