

# Indices of stability for nonlinear waves and patterns

**Christopher Jones**

University of North Carolina at Chapel Hill

*ckrtj@email.unc.edu*

## **Abstract**

It would be nice to look at a wave, in one dimension, or a pattern in higher dimensions, and be able to decide if it would be stable relative to a prescribed dynamical equation of interest. Because of Sturm–Liouville theory, this is often possible for a scalar equation in one dimension. I shall discuss some thoughts as to how such a dream might be realized for systems of equations in one and higher dimensions.