

1032-78-120

Alejandro Aceves* (aceves@math.unm.edu), Humanities Building 4th Floor, MSC03 2150, Albuquerque, NM 87131, and **Michelle Hummel, Ronald Chen** and **Thomas Hagstrom**.

Modeling optical supercontinuum generation in photonic structures. Preliminary report.

Photonic structures have been built to produce novel and complex dynamics of optical pulses. One of the most intriguing is that of a broadening of the spectrum of a pulse resulting from linear dispersive and nonlinear effects. Here we present results that suggest shock regularization could explain the mechanism that triggers this dynamics. (Received August 17, 2007)