Abstract Submitted
for the MAR15 Meeting of
The American Physical Society

**Experimental Studies of a Driven PT Dimer** MAHBOOBEH CHITSAZI, NICHOLAS BENDER, LUIS FOWLER-GERACE, HUANAN LI, FRED ELLIS, TSAMPIKOS KOTTOS, Department of Physics, Wesleyan University, Middletown CT-06459, USA — We experimentally investigate a driven PT system consisting of two Ultra-High-Frequency oscillators coupled by a time-dependent capacitance. The experimental circuit uses active feedback controlled by photocells for the implementation of gain and loss, along with varicaps for the time dependent coupling. We show that this system is mapped to a one-dimensional Floquet lattice with local PT-symmetry. This isomorphism allows us to experimentally investigate PT-dynamics in extended lattices.

Mahboobeh Chitsazi
Department of Physics, Wesleyan University, Middletown CT-06459, USA

Date submitted: 12 Nov 2014 Electronic form version 1.4