1171-35-103Robert Buckingham*, Department of Mathematical Sciences, University of Cincinnati,
Cincinnati, OH 45221. Universal Rogue Wave Behavior.

Rogue waves are short-lived, high-intensity pulses that have been observed in the ocean and fiber optics. Mathematically, rogue waves may be modeled by critical focusing in nonlinear dispersive equations. We will discuss a series of recent results suggesting that high-order rogue-wave behavior is universally described for a variety of different equations and initial conditions by a certain Painleve function discovered by Suleimanov in 2017. This is joint work with Deniz Bilman, Bob Jenkins, and Peter Miller. (Received August 09, 2021)