Jonathan Luk and Sung-Jin Oh* (sjoh@kias.re.kr). Instability of Cauchy horizon under spherically symmetric perturbations.

The strong cosmic censorship conjecture of Penrose predicts that the Cauchy horizon inside a rotating (Kerr) or charged (Reissner-Nordstrom) black hole is unstable under generic perturbations. In this talk, I will present recent results concerning the instability of the Cauchy horizon of the Reissner-Nordström (subextermal, nonzero charge) spacetime in the class of spherically symmetric scalar perturbations. (Received September 20, 2016)