

In this talk I will discuss a general class of holographic Yang-Mills-like theories at finite theta-angle, described by 5D Einstein-axion-dilaton theories, in which the instanton density operator is dual to the bulk axion field. A non-trivial UV value for the theta-angle induces a running of the axion in the bulk, which backreacts on the geometry. I will discuss the general features of these solutions, and in particular how the axion backreaction affects the spectrum of excitations and the perturbative stability. I will comment on the possibility of describing instanton condensation in this context.