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## Phase transitions and light scalars in bottom-up holography

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In this talk, within the bottom-up approach to holography, I will consider a class of six-dimensional gravity models and solutions that can be interpreted in terms of dual five-dimensional conformal field theories deformed by a single scalar operator. The scaling dimension of this operator is treated as a free parameter. One dimension in the geometry is compactified on a shrinking circle, mimicking confinement in the dual four-dimensional theories.

I will discuss the mass spectrum of bosonic states, and along confining branch of solutions, appearance of a tachyonic instability in part of the parameter space. In a region of parameter space nearby the tachyonic one, the lightest scalar particle can be interpreted as an approximate dilaton and its mass is parametrically suppressed. The dilatonic and tachyonic regions will be hidden behind a first-order phase transition, and the (approximate) dilaton will appear in metastable solutions. If time permits, I will consider the generalisation of the method to composite Higgs models.

**Authors:** FATEMIABHARI, Ali (Swansea University); Dr ELANDER, Daniel; Prof. PIAI, Maurizio

**Presenter:** FATEMIABHARI, Ali (Swansea University)

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