Speaker: **Eudave-Munoz, Mario**
Title: *Incompressible surfaces and (1,1)-knots*
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Abstract: Let T be a standard torus in S^3. K is a $(1,1)$-knot if K can be positioned so that K intersects T in two points, which divide K into two arcs, and such that each of the arcs is parallel to a simple arc lying on T.

We give a description of all $(1,1)$-knots which contain an essential meridional surface, that is, an incompressible, meridionally incompressible, not ∂-parallel, properly embedded surface in the exterior of a knot K, whose boundary consists of meridians of K.

In particular, we show that for given $g > 0$ and $h > 0$, there are $(1,1)$-knots which contain an essential meridional surface of genus g, and whose boundary has $2h$ components. This contrasts with a result of Gordon and Reid, which shows that $(1,1)$-knots cannot contain "planar" essential meridional surfaces.