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**Hyunki Min\*** (hmin38@gatech.edu), 180 Jackson st. NE, ATP 5308, Atlanta, GA 30312, and  
**John Etnyre** and **Anubhav Mukherjee**. *Which 3-manifolds bound exotic 4-manifolds?*

It has been a long standing question that which closed 4-manifolds admit exotic smooth structures. In this talk, we consider the relative version of this question: given a 3-manifold, does it bound a compact 4-manifold which admits infinitely many smooth structures? We give several criteria when a 3-manifold bounds an exotic 4-manifold. This is a joint work with John Etnyre and Anubhav Mukherjee. (Received September 09, 2020)