1117-53-332 **Jonathan Simone*** (js3fv@virginia.edu). *2-replaceability.*

It is known that if $p = n^2$ and $q = nm - 1$, where n and m are coprime, then the lens space $(L(p, q), \xi_{st})$, where ξ_{st} is the canonical contact structure, has a symplectic filling of Euler characteristic 1. In this talk, we will produce a complete list of linear plumbings whose boundary lens spaces, equipped with the canonical contact structure, have minimal symplectic fillings of Euler characteristic 2. We call such plumbings "2-replaceable." We will then use these linear plumbings to build "2-replaceable trees" and finally use symplectic cut and paste to produce an exotic rational surface. (Received January 17, 2016)