Multiple sheeted hulls revisited

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In 2006 Evgeny Poletsky and I gave an example of a single valued holomorphic function f defined on the complement of a fat Cantor set with the property that the pluripolar hull of its graph has two sheets over this complement. In this lecture we will show that this phenomenon comes about because the maximal finely analytic extension is a two-valued function. This also shows that the hull has (at least) two points on a large part of the Cantor set. The proof of this last part is work in progress, based on earlier work with Armen Edigarian.

Notions like pluripolar hull and fine analyticity will be explained.