



# Colloquium del Departamento de Análisis Matemático

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**“A traveling salesman theorem for Reifenberg  
flat surfaces”**

**Jueves 26 de mayo de 2016**  
a las 13:00 horas en el seminario 222

**Abstract:**

The analyst's traveling salesman theorem of Jones gives necessary and sufficient conditions for when a compact set in the plane can be contained in a curve of finite length, and estimates the length of the shortest such curve in terms of the multiscale geometry of the set in question. The result has been extended to higher dimensions by Kate Okikiolu and to curves in Hilbert space by Schul. Jointly with Schul, and building on work by David and Toro, we have now developed a complete analogue of this result for Reifenberg flat surfaces.

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