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## SEMINARIO

**Elvira Pérez Callejo**

*Universitat Jaume I*

### ***Computation of a rational first integral of given genus of a foliation on a Hirzebruch surface***

**Abstract:** To decide whether a plane foliation has a rational first integral is an open problem. We provide an algorithm that, under certain conditions, decides about algebraic integrability of fixed genus which, in the affirmative case, computes a rational first integral. This algorithm uses the extension of the foliation to a Hirzebruch surface and the reduction of its dicritical singularities.

This is a joint work with Carlos Galindo and Francisco Monserrat.

**Seminario IMUVa. Edificio LUCIA**

**3 de Febrero de 2023 (12:00)**

**Organiza: GIR SINGACOM**

