# SEMINARIO
# Umberto Martínez-Peñas
## *University of Toronto*

## *Sum-Rank Codes and Linearized Reed-Solomon Codes*

**Abstract:** The sum-rank metric naturally extends both the Hamming and rank metrics in coding theory. In this talk, we will present some of their applications and general properties. We will also present linearized Reed-Solomon codes, which constitute the first general family of maximum sum-rank distance (MSRD) linear codes whose field sizes are subexponential in the code length. Moreover, these codes are tightly connected to skew Reed-Solomon codes, constructed using skew polynomials, and are natural hybrids between generalized Reed-Solomon codes and Gabidulin codes.

**Seminario IMUVA. Edificio LUCIA**
**Jueves 20 de Diciembre de 2018 (13:00)**
**Organiza: GIR SINGACOM**