



# COLLOQUIUM

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**MRSD Codes and Anticodes in the sum-rank metric**

**Friday April 7th at 1:00pm in RT 1516**

*Bio:* Eduardo Camps-Moreno received his Ph.D. from National Polytechnic Institute (Mexico). His main interests includes commutative algebra and coding theory. He has been awarded with the Sotero Prieto Prize from the Mexican Mathematical Society for the best undergraduate, the Excellence Scholarship given by the Swiss Government and he recently won the Presidential Postdoctoral Fellowship of the Polytechnic Institute of Virginia. Currently, he is a Visiting Scholar at CSU. His main research interests are commutative algebra and coding theory.

*Abstract:* Let  $F$  be a finite field and  $V$  a  $F$ -vector space. Let  $d$  be a norm over  $V$ . A linear space  $C \subseteq V$  is called a  $d$ -code if all the elements of  $C$  has norm at least  $d$ .  $C$  is called a  $r$ -anticode if the elements of  $C$  has norm at most  $r$ . In this talk we will discuss bounds on the dimensions of codes and anticodes in the sum-rank metric and we will provide characterization of optimal codes (called MSRDC) and optimal anticodes.

**Refreshments will be served in RT 1517 at 2:10pm**