## LUCIA MOURA, University of Ottawa

Covering Arrays and Combinatorial Testing

In the past decades, several combinatorial arrays useful in testing applications have been investigated. For example, cover-free families are used in group testing, while covering arrays and locating arrays are used in hardware and software testing. These objects have close ties to extremal set systems and error correcting codes, which have played an important role in combinatorial array construction. In this talk, we discuss common properties of various types of combinatorial arrays, as well as construction techniques and applications in computer science.