AIDEN BRUEN, U of Calgary Information sets and linear algebra

Modern industrial error correction involves convolutional codes and linear codes over finite fields. For the latter, a data vector of length k is encoded to a codeword w of length n say with n>k. Given just the k entries of w in an information set we can recover w and thus the input data. We announce new results on information sets using a fundamental new result in linear algebra. [Joint with Trevor Bruen]