Institut für Diskrete Mathematik

Combinatorics Seminar

Friday 6th May 15:15 (Irregular time)

Online meeting (Webex)

List-decoding for Reed-Solomon codes

Lisa Sauermann

(Massachusetts Institute of Technology)

Reed-Solomon codes are an important and intensively studied class of error-correcting codes. After giving some background, this talk will discuss the so-called list-decoding problem for Reed-Solomon codes. More specifically, we prove that for any fixed list-decoding parameters, there exist Reed-Solomon codes with a certain rate, which is optimal up to a constant factor. This in particular answers a question of Guo, Li, Shangguan, Tamo, and Wootters about list-decodability of Reed-Solomon codes with radius close to 1. Joint work with Asaf Ferber and Matthew Kwan.

Meeting link:

https://tugraz.webex.com/tugraz/j.php?MTID=m40f85343e56ff5051d731ace1bea82e4

Meeting number: 2731 089 0467

Password: btHRJxCa252

Joshua Erde, Mihyun Kang