abstract

Special Lecture
Topic:

Speaker:

Affiliation:

Date:

Time/Room:

We explain in this talk how Ramanujan graphs can be used to devise optimal cycle codes and review how other graph families related to a construction proposed by Margulis yield interesting families of quantum codes with logarithmic minimum distance. We finish the talk by providing another simple graph theoretic construction with improved minimum distance which grows proportionally to the square root of the quantum code length. (This is joint work with Gilles Zemor.)