

CoE-MaSS weekly seminar series

THE DST-NRF CENTRE OF EXCELLENCE IN
MATHEMATICAL AND STATISTICAL SCIENCES (CoE-MaSS)
PRESENTS A SEMINAR BY

Prof Jenny Key

*(Department of Mathematics,
University of the Western Cape, South Africa)*

“Special LCD codes from graphs”

Friday, 4 May 2018; 10h30-11h30
CoE-MaSS Seminar Room, 1st floor,
Math Sci Bldg, West Campus, Wits University.



LCD codes are linear codes C such that $C \cap C^\perp = \{0\}$. The term was introduced by Massey in 1992 who exhibited some of the properties of such codes that made them attractive for use. They have applications in data storage, communications systems, consumer electronics, and cryptography. The talk will concern LCD codes of a particularly applicable variety that can be obtained from the adjacency matrices of graphs. Using the known properties of the graph, this type of LCD code has special decoding properties through nearest neighbour decoding. The talk will give the background on LCD codes and the special property that relates to graphs, and then an application from a class of strongly regular graphs will be used to illustrate the properties. This relates to joint ongoing work with B. Rodrigues (UKZN), and with W. Fish and E. Mwambene (UWC). Email: jgkey@uwc.ac.za

You can connect to all CoE-MaSS weekly seminar series remotely using Vidyo.

1. Click on this link to connect to the [CoE-MaSS Seminar Room](#)
2. Type in your display name (e.g. *UKZN-NameSurname*)
3. Click Go.

If you have trouble connecting, please phone the Technical Support Officer on duty in-venue between 10h00-10h25 on +27(0)11 717 7069. **This phone will not be answered once the seminar has started.**

Important videoconferencing netiquette:

Please ***mute your microphone*** so that there is no feedback from your side into the virtual room. During the Q&A slot you can then unmute your microphone if you have a question to ask the speaker. Thank you.

