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## Algebra and Number Theory Seminar

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**Dr Jens Zumbraegel**

will speak on

### **On the Pseudocodeword Redundancy**

Mon 8th February 2010 at 4:00PM

Location: Mathematical Sciences Seminar Room

We define the AWGNC, BSC, and max-fractional pseudocodeword redundancy of a code as the smallest number of rows in a parity-check matrix such that the corresponding minimum pseudoweight is equal to the minimum Hamming distance. We show that most codes do not have a finite pseudocodeword redundancy. We also provide bounds on the pseudocodeword redundancy for some families of codes, including codes based on designs.

Joint work with Mark F. Flanagan and Vitaly Skachek.

This talk is part of the **Algebra and Number Theory** series. For more, see  
<https://maths.ucd.ie/seminars>