Codes for error-correction

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Abstract:

How do QR codes such as the one shown below store information while incorporating logos or other cool designs? What makes them scan properly even if they are smudged or torn or the material on which they are written is damaged? This is just one example of error correction at work. Error control is essential in all digital storage and communications and is realized via encoding schemes from error correcting codes. Reed-Solomon codes are algebraic geometry codes, a large family of error correcting codes used in a variety of applications and a topic of current research. In this talk, we explore the mathematics behind codes used for error correction.

Friday, January 23, 2015
2:50-3:00 Refreshments
3:00-4:00 PM
SCC 120
EVERYONE IS WELCOME