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VIENNA DOCTORAL SCHOOL **MATHEMATICS**

PhD Colloquium

Tomack Gilmore: **Rhombus Tilings and Electrostatistics**

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This talk is about a combinatorial problem that lies at the boundary between mathematics and statistical physics - counting arrangements of rhombus shaped tiles within hexagons that contain holes in their interior. There are (at least) two good reasons for studying these things: firstly, their enumeration is quite a challenge; secondly, asymptotically speaking, the effect the holes have on each other within tilings of the plane appears to be governed by a Coulomb-like law for two dimensional electrostatics.

4 October,

