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d-wave Pairing in the Two-Dimensional Hubbard Model¹

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In this talk we will review numerical evidence showing that the 2D Hubbard model can exhibit antiferromagnetism, stripes, d(xx-yy) pairing and pseudogap behavior. These numerical studies show that the different phases are delicately balanced with respect to small changes in parameters, reminding one of the cuprate materials. We will then discuss the structure of the pairing mechanism in this model.

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