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## Lattice models for Josephson junctions and graphene superlattices

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# **Lattice models for Josephson junctions and graphene superlattices**

PROEFSCHRIFT

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Viacheslav Ostroukh

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Cover: current distribution in a disordered graphene quantum dot (front),  
computed in a tight-binding model (back).

*To my parents.*  
*Moïm батькам.*



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