# title

# A, $^1$ B, $^1$ and $C^1$

<sup>1</sup>Department of Physics, Harvard University, Cambridge, Massachusetts 02138, USA This is the abstract.

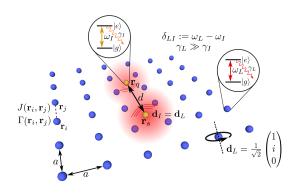


Figure 1. •

#### I. INTRODUCTION

This is the introduction, see [not sure about this statement] Fig. 1.

$$H = p^2 \tag{1}$$

We see in Eqs. (1) and Fig. 1, e.g., test [1]

# II. MODEL

[arb. geometry, Green's Tensor, Couplings,
Polarizations -> Distance dependence,
Hamiltonian, Self-energy, Ref. to Taylor's
work]

#### III. SINGLE IMPURITY CASE

[Define lattices, define distances related to lattices,  $\Gamma_{\rm eff},$  constant area]

# A. Square vs. triangular

# 1. Interstitial

[Interstitial which imposes one more length scale -> refer to analytics, numerics -> impurity position]

2. Substitution

[Does NOT(!) impose another length scale as long as it is not away from the center -> refer to analytics, -> always at band edge, numerics -> impurity position]

# B. Monoclinic vs. rectangular lattice

[similar arguments]

- 1. Interstitial
- 2. Substitution
- 3. Varying scaling factors

[justify why we use interstitial in the following]

# IV. TWO IMPURITY CASE

[Q-factor, analyze different lattices -> discuss the most important figures, constant distance]

- A. Monoclinic lattice
- B. Rectangular lattice

# V. CONCLUSIONS AND OUTLOOK

These are the Conclusions.

Acknowledgments. We would like to thank [add people]. This work was supported by [add funding sources]

The numerical simulations were performed with the open-source framework QuantumOptics.jl [1].

[1] S. Krämer, D. Plankensteiner, L. Ostermann, and H. Ritsch, QuantumOptics.jl: A Julia framework for sim-

ulating open quantum systems, Computer Physics Communications  ${\bf 227},\,109$  (2018).