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## **Kurzzusammenfassung**

## **Abstract**



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# Motivation

Test

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Test source

## Conventions

Throughout the text of this thesis scalars are written in italic  $s$ , vectors in bold italic  $\mathbf{s}$  and matrices in bold  $\mathbf{M}$  fonts. A matrix element is denoted as  $[\mathbf{M}]_{\alpha,\beta}$ . The summation/multiplication over nearest neighbour sites  $i$  and  $j$  is  $\langle ij \rangle$  as a subscript to  $\sum/\prod$ . Furthermore, Hartree atomic units are used in general and only in selected instances it is deviated from this:  $\hbar = m_e = e = 4\pi/\epsilon_0 = 1$ .



# I Conclusion



## List of Symbols



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