



Tjark Sievers – I. Institute of Theoretical Physics

## Parallelization Levels in Quantum ESPRESSO

# k-point Parallelization

# Plane-wave Parallelization

wave-function coefficients

# Linear Algebra Parallelization

distributes matrix diagonalization and matrix-matrix

# Summary: Parallelization in pw.x

- ▶ **plane wave:** orbitals in plane wave basis set
- ▶ **tasks:**