

Hi, I am Stella!





HAns
Riegel
BOnn

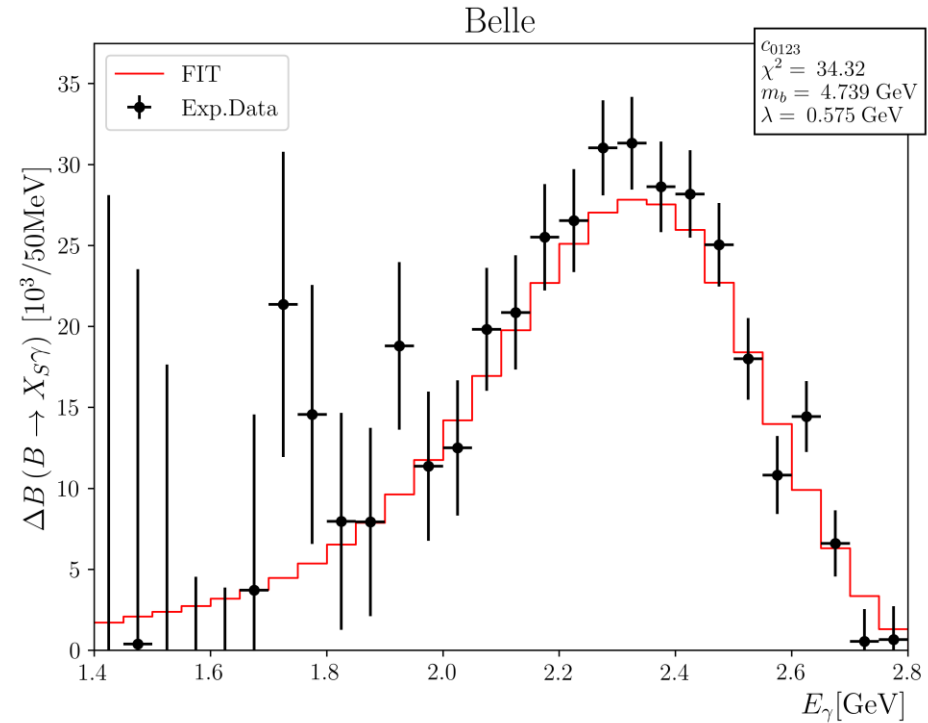


Research:



PySIMBA

Implementation of the global fitting framework SIMBA in python



Bachelor thesis

Sensitivity study of $B^+ \rightarrow K^+ n \bar{n}$ decays in Belle II data using hadronic tagging reconstruction

Theory Course:

QFT & QCD

Lattice QCD

Simulation



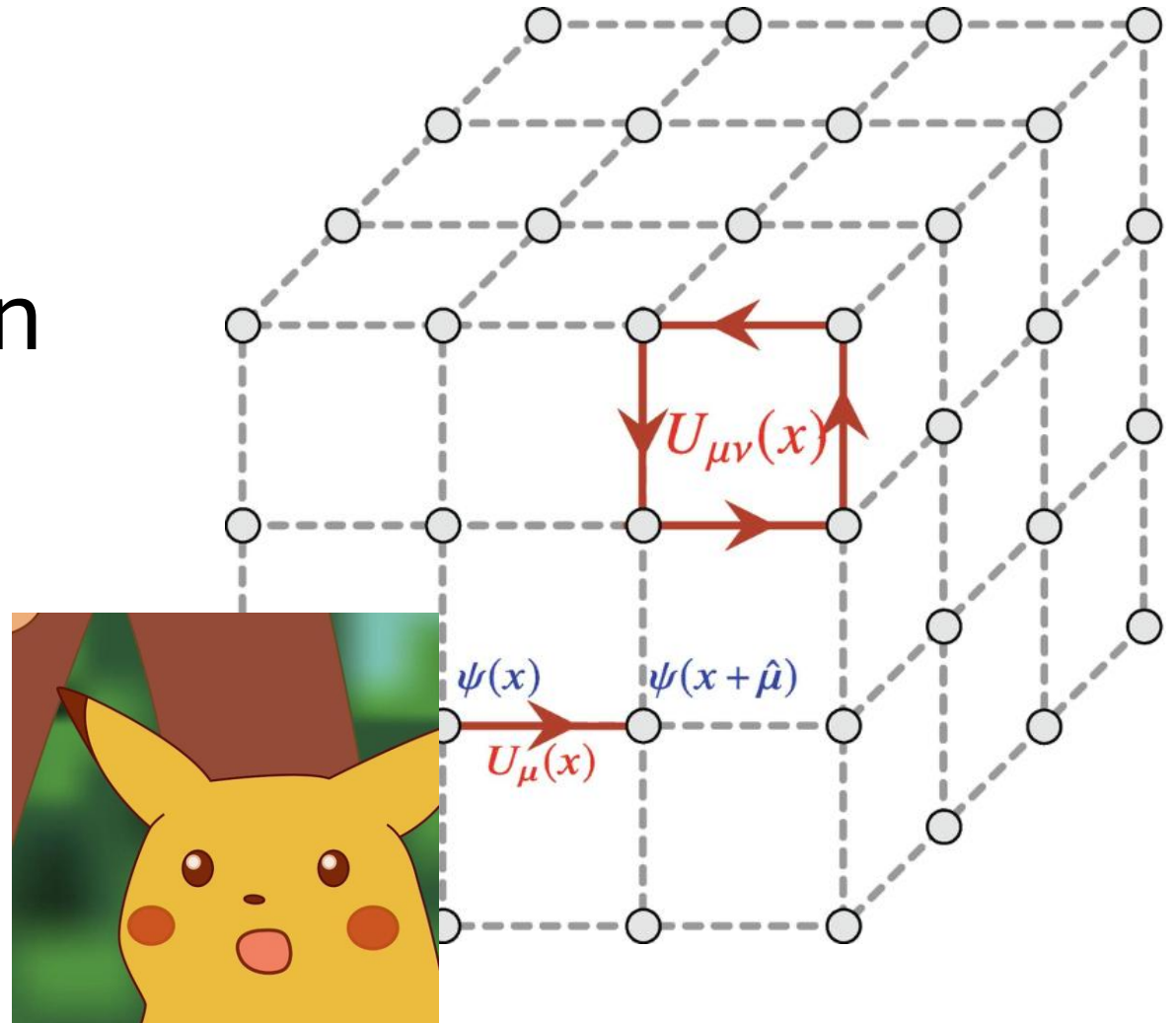
What do we simulate?

Lattice size: $20^3 \times 4$

→ $\approx 90s$ per configuration

$22470 \cdot 90s \approx 23,4$ days

Lattice size in research:
 $36^2 \times 48 \times 6$



Order!

Parameter Ω

$\text{Im}(\langle \Omega \rangle)$

Confined
Phase



$\text{Re}(\langle \Omega \rangle)$

$\text{Im}(\langle \Omega \rangle)$

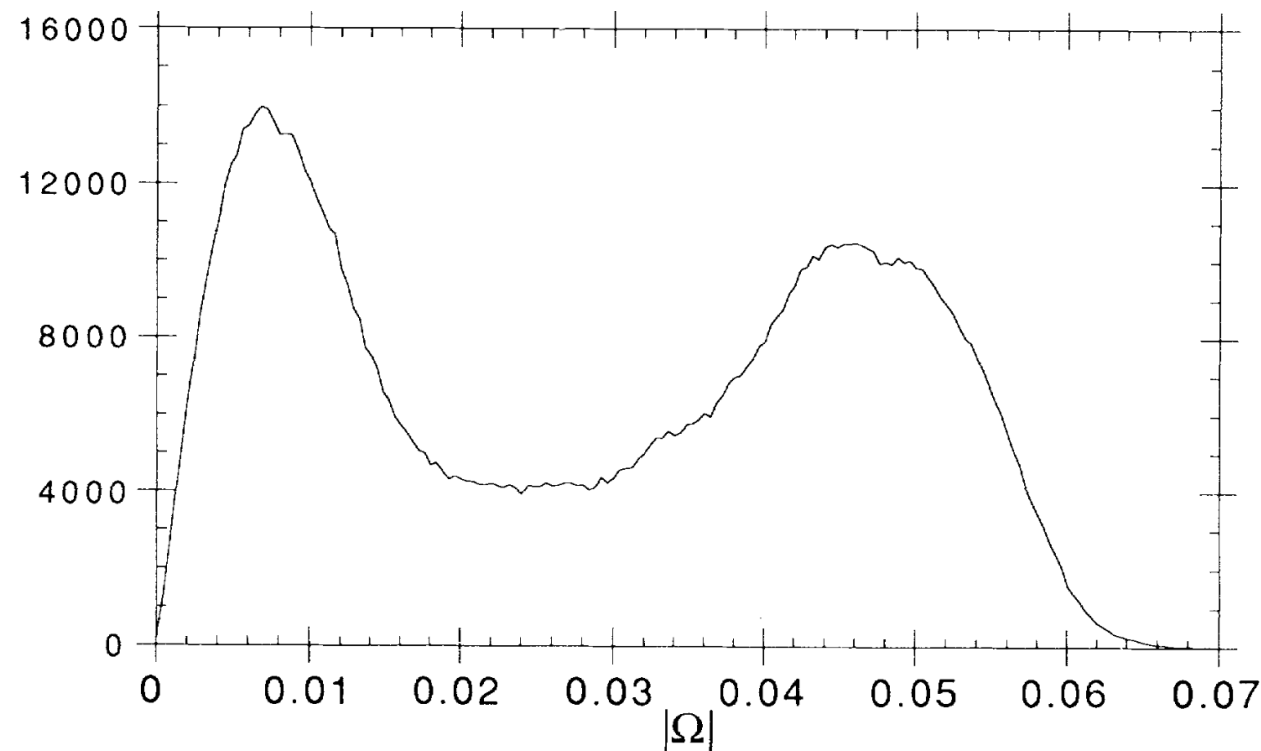
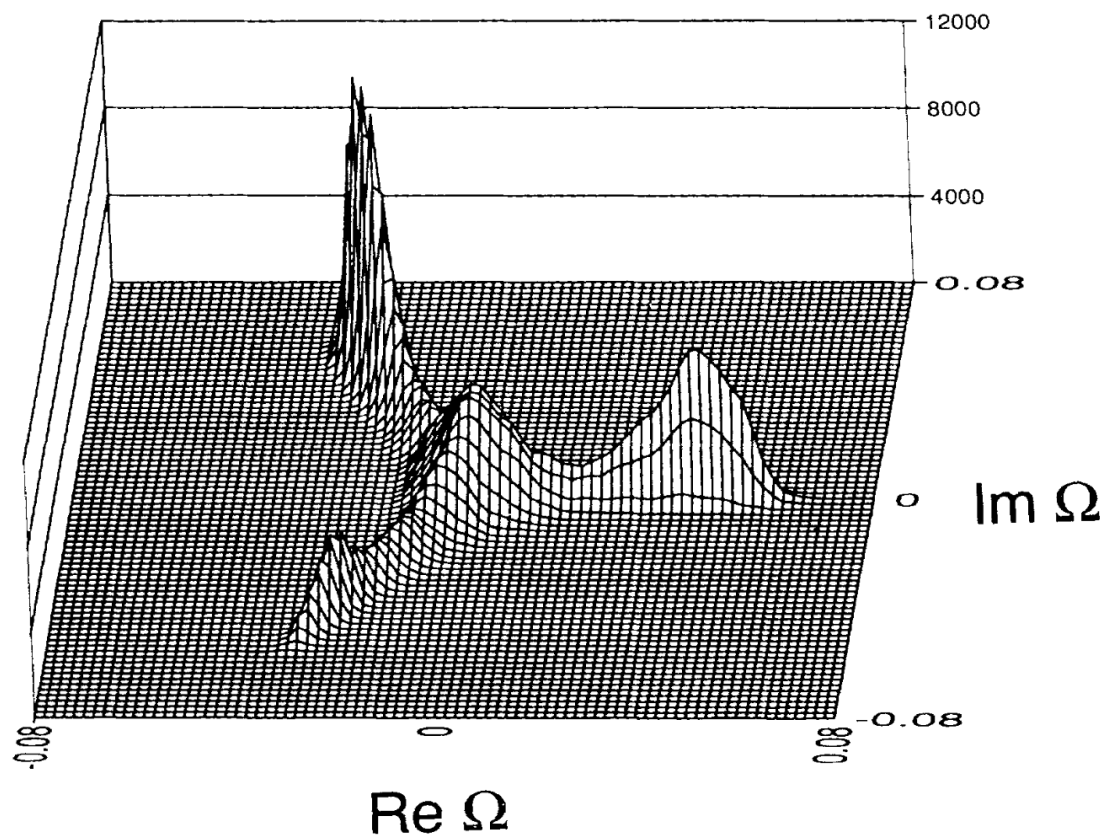
Deconfined
Phase



$\text{Re}(\langle \Omega \rangle)$

Order!

Parameter Ω



Y. Iwasaki et al., Physical Review Letters 67 (1991) 3343

