Possible GSI Contributions

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High resolution simulations of intense beams in linacs, synchrotrons and accumulator/compressor rings

- 'Impedance budget':
  Longitudinal beam dynamics close or above the stability boundary
- Transverse particle tracking studies (beam loss, emittance growth):
  - space charge induced resonace crossing
  - bunch compression in rings
  - long term stability in rings ('DA with space charge')
- Software platform for beam dynamics simulation and analysis tools

Dedicated beam physics experiments