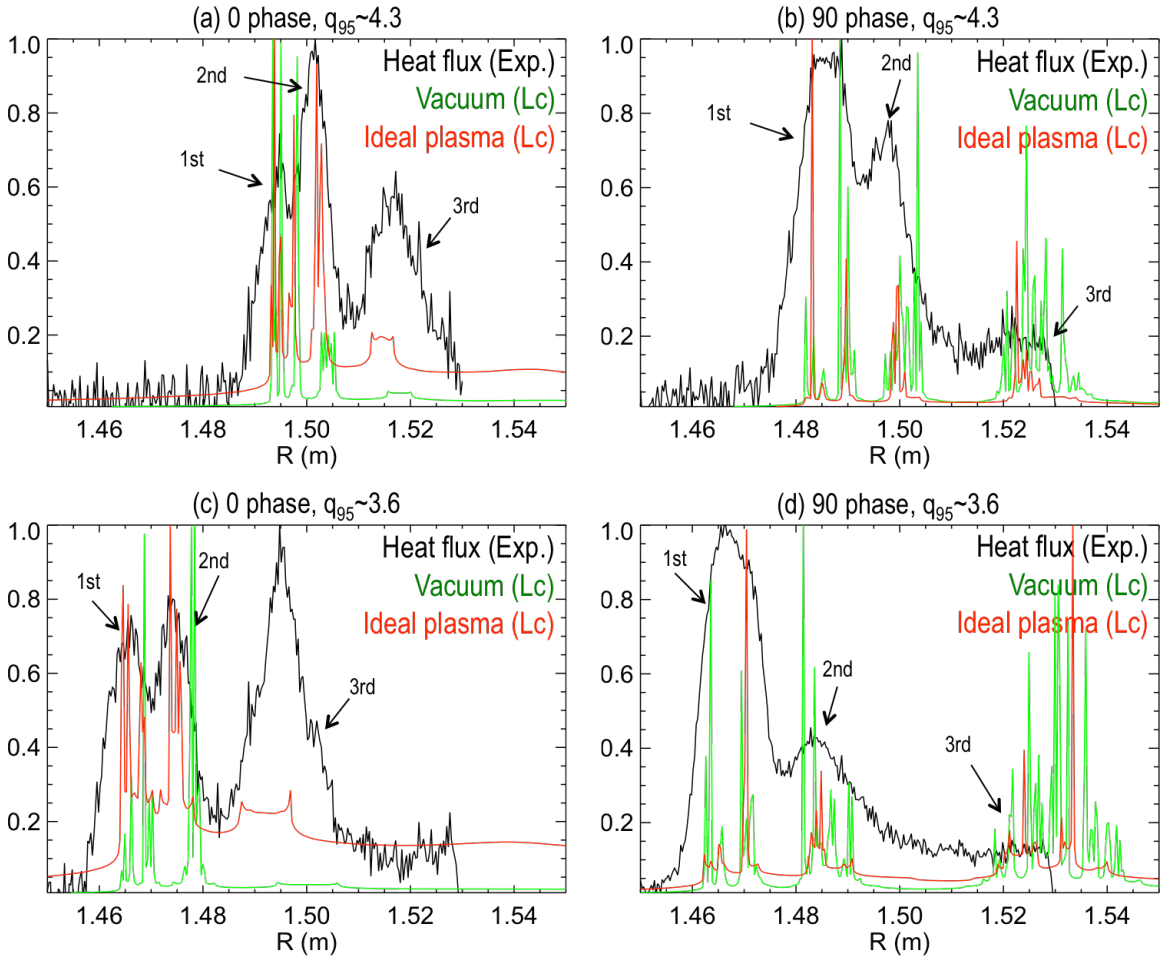
Comparison of Divertor Heat Flux Splitting by 3D Fields with Field Line Tracing Simulation in KSTAR (TH-P/6-5) : W. Choe (KAIST) et al.

- Significant splitting of divertor heat flux by 3D fields was achieved and measured by IRTV in the various 3D configurations on KSTAR
- Magnetic field line tracing simulations using POCA-FLT code well reproduce the splitting of divertor heat flux profiles
- Simulations with ideal plasma response better agree with measurements
  - 0 degree phase (a, c): Non-resonant components are excited by ideal plasma response to produce the 3rd peak that is not captured by vacuum fields
  - 90 degree phase (b, d): Pitch-aligned resonant components are shielded by ideal plasma, leading to mitigation of the 3rd peak of vacuum fields - Closer to measured heat flux profile



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