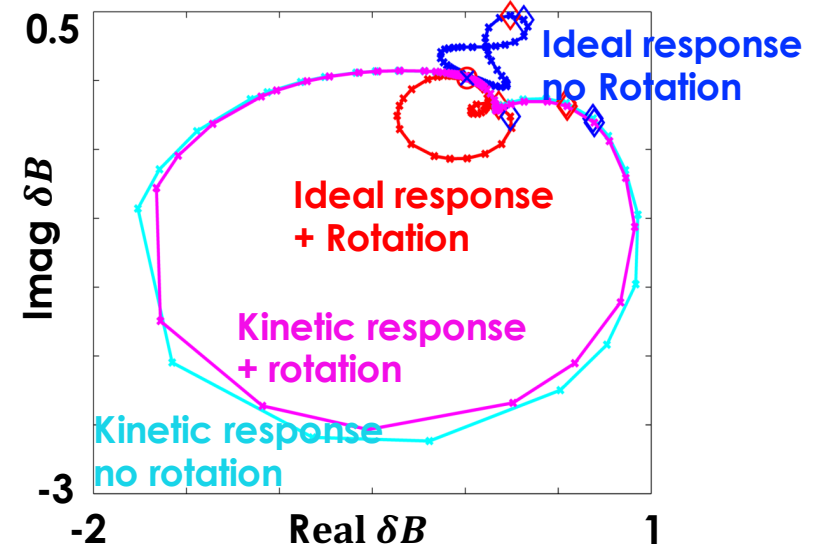


Nyquist MHD Spectroscopy Diagnoses Impacts of Kinetic Effects And Multi-Modes' Contribution on Plasma Response

- Nyquist contour shows kinetic effects dramatically change plasma response.
- Modified Nyquist method including both coil frequency and phase dependence can identify the poles (eigenmodes) contributing to plasma response

Nyquist MHD spectroscopy is available for extracting each major eigenmode in experiments. It is powerful to detect MHD stability and to optimize ELM control.

Simulated DIII-D n=1 Nyquist contour



DIII-D n=2 DC response experiments fitting

