

Transport Processes in the Vicinity of an Island

K. C. Shaing

University of Wisconsin

Stellarator Teleconference

December 14, 2006

- **A magnetic island introduces additional variations in $|B|$ in stellarators.**
- **These additional variations in $|B|$ enhance plasma viscous force in the vicinity of the island.**
- **The enhanced viscous force will affect plasma confinement, momentum transport, and MHD stability.**
- **The goal is to work out all these consequences and test them in the experiments.**