

Generic ICC Burning Plasma Issues

Bad News: One size doesn't fit all

- Many ICC's at Exploratory Concept development stage
- Nevertheless, fundamental physics considerations imply that plasma "burn" will occur very differently from $Q =$ quasi-steady system

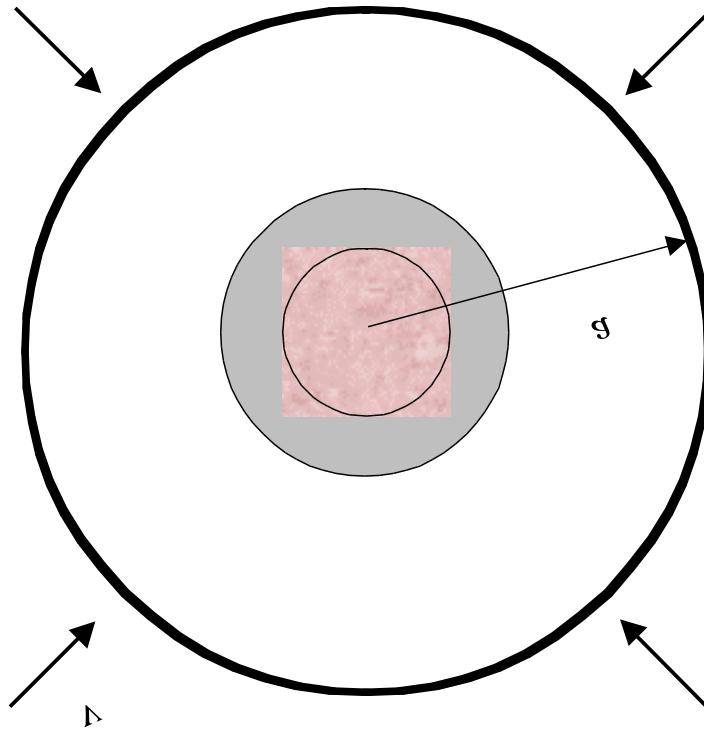
Good News: Diversity is win-win

- ICC's provide enhanced parameter range to extend physics base in support of BP experiment
- Possibility that BP is not directly on reactor path means that ICC can contribute to next generation

Really Good News: Science is great unifier

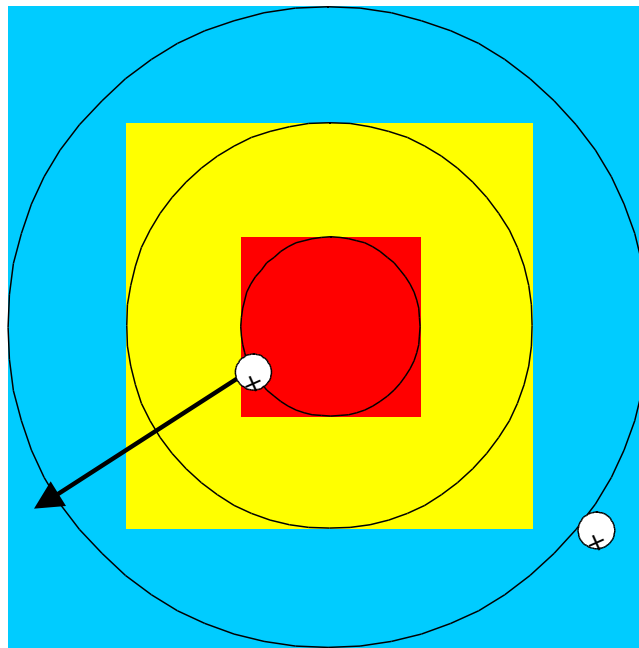
- BP now couched in terms of science goals defining parameters, then finding lowest cost approach to these
- Present climate allows ICC advocates luxury to support BP on basis of broad scientific program which is concept-inclusive??

MTF: Inertial Limit on Burn



- $Q \sim a v$ from momentum and energy conservation and constants of nature (Never the end of story!)

Direct Conversion of Charged Fusion Product Energy in Electrostatic Confinement



- Well is several kT , so adding fuel ions to replace fusion products provides required heating power

ICC Issues for Burning Plasmas

- Keep discussion on science issues and define facility accordingly
- Accept risk (MNR suggests Fermi rule of 50%)
- Maintain base program (we all need it)