

Abstract Submitted  
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**Turbulent Thermal Insulation of Spheromak Fusion Reactors**

ROBERT JONES, Emporia State University — Spheromak fusion plasmas are likely to suffer from stochastic magnetic fields (Phys. Rev. Letts. vol. 91, #4, 045004, 2003) and have confinement:  $\tau = (B/dB)(B/dB)(r/v)(r/v)f$ . This degradation in confinement can be minimized if the collision frequency  $f$  is intentionally enhanced by turbulence (see Jones, Plasma Phys. vol. 22, pg 753, 1980)  $f = (\text{plasma frequency})^*$  ( $W/nT$ ), up to a level  $W/nT$  limited by plasma overheating:  $T/\tau = f W/n$ . (R. Jones, Current Science, vol. 57, #18, pg. 991, 1988)

Robert Jones  
Emporia State University

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