



Volume 8, Issue 3, Article 62

On Chaotic Order of Indefinite Type

Authors: [Takashi Sano](#),

Keywords: Chaotic order; (Indefinite) Inner product space; Furuta inequality of indefinite type.

Date Received: 02/06/06

Date Accepted: 27/04/07

Subject Codes: 47B50, 47A63.

Editors: [Frank Hansen](#),

Abstract: Let A, B be J -selfadjoint matrices with positive eigenvalues and $I \geq^J A, I \geq^J B$. Then it is proved as an application of Furuta inequality of indefinite type that

$$\text{Log } A \geq^J \text{Log } B$$

if and only if

$$A^r \geq^J (A^{\frac{r}{2}} B^p A^{\frac{r}{2}})^{\frac{r}{p+r}}$$

for all $p > 0$ and $r > 0$.



[Download Screen PDF](#)



[Download Print PDF](#)



[Send this article to a friend](#)



[Print this page](#)

search

[\[advanced search\]](#)

copyright 2003

[terms and conditions](#)

[login](#)