

ISTANBUL CENTER FOR MATHEMATICAL SCIENCES
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ISTANBUL ANALYSIS SEMINARS

$B(H)$ Has Classically Normal Pure States

Charles Akemann
Department of Mathematics, UC Santa Barbara, USA

A pure state f of a von Neumann algebra M is called *classically normal* if f is normal on any von Neumann subalgebra of M on which f is multiplicative. Assuming the continuum hypothesis, Nik Weaver and I have shown that $B(H)$ has classically normal, singular pure states (as do other factors of types *II* and *III*). This result answers a 1959 question of Kadison and Singer (**not** the most famous question from that paper!). This talk will outline the methods used for possible application to other problems. I will also discuss the relationship between this problem and its more famous brother, the Kadison-Singer Problem.

Date and Time: May 18, 2007, 15:30

Place: IMBM Seminar Room, Boğaziçi University

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