ANALYSIS SEMINAR

QUASI-MULIPLIERS AND ALGEBRIZATIONS OF OPERATOR SPACES

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TEUSDAY, SEPTEMBER 18, 2007 AT 2:15 PM IN HUME 331

Abstract : One of the most interesting questions in the operator space theory was: "What are the possible operator algebra products that a given operator space can be equipped with?" I answered this question by using quasi-mulipliers. That is, the possible operator algebra products that a given operator space can be equipped with are precisely the bilinear mappings implemented by the contractive quasi-multipliers of the operator space. Furthermore, I gave an elegant geometric characterization of the operator algebra products using the Haagerup tensor product. The Blecher-Ruan-Sinclair Theorem is obtained as a simple corollary.