

On the geometry of the unit ball in a JB^* -triple

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Abstract. The purpose of this talk is to address the problem of identifying the norm-exposed faces of the unit ball A_1 in a JB^* -triple A . This problem has a local counterpart since each tripotent u in the bidual A^{**} of a JB^* -triple A , compact relative to A , gives rise to a complex Banach space $P_2(u)A$ with bidual the JBW^* -algebra $A_2^{**}(u)$ that is a weak*-closed subtriple of A^{**} . It will be shown that both locally and globally the norm-exposed faces of A_1 are those corresponding to compact support tripotents of elements of norm one in the dual space A^* of A .

This is joint work with C. MARTIN EDWARDS (The Queen's College, Oxford).