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The Jordan normal form of higher order Osserman algebraic curvature tensors

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Abstract: We construct new examples of algebraic curvature tensors so that the Jordan normal form of the higher order Jacobi operator is constant on the Grassmannian of subspaces of type (r, s) in a vector space of signature (p, q) . We then use these examples to establish some results concerning higher order Osserman and higher order Jordan Osserman algebraic curvature tensors.

Keywords: higher order Jacobi operator, Osserman algebraic curvature tensors, Jordan Osserman algebraic curvature tensors

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