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On degenerate secant varieties of secant defect two. (English) Zbl 0910.14029
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Summary: We study projective manifolds with degenerate secant varieties under assumptions that the secant defect is two and that the Gauss maps of secant varieties have the largest images. In particular we classify 7-dimensional projective manifolds with 13-dimensional degenerate secant varieties whose Gauss maps have 10-dimensional images. We also determine Del Pezzo fibrations over curves with smallest embedded codimension in the case that the degree of a general fiber is three or four.

MSC:

14N05 Projective techniques in algebraic geometry

14J40 n -folds ($n > 4$)

Keywords:

degenerate secant varieties; 7-dimensional projective manifolds; Gauss maps; Del Pezzo fibrations

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