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David E. Blair* (blair@math.msu.edu), Department of Mathematics, Michigan State University, East Lansing, MI 48824-1027. *Product Twistor Spaces.*

We first review the construction the classical twistor spaces and then review the construction of hyperbolic twistor spaces; the latter are twistor spaces whose fibres are hyperbolic planes of constant negative curvature rather than spheres as in the classical case. In particular the fibres are the positive sheets of a two-sheeted hyperboloid as one of the standard models of the hyperbolic plane. We then turn to product twistor spaces which are twistor spaces whose fibres are one sheeted hyperboloids; as doubly ruled surfaces these have a natural product structure. In both hyperbolic cases, the geometry arises from that of a para-quaternionic base manifold. (Received February 03, 2006)