

ASPECTS OF PROJECTIVE DIFFERENTIAL GEOMETRY

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ABSTRACT. In this talk I show that a solution σ of a projectively invariant Hessian equation defined on a projective manifold M is in one-to-one correspondence with a parallel section of the co-tractor bundle on M . The zero set of σ forms a hypersurface Σ and has a natural projective structure induced from M . I show that the intrinsic tractor connection on Σ agrees with the tractor connection on M under appropriate identification. A question to ask is whether the projective structure on Σ is in any way 'restricted' by the given equation on M .

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