

# On Deszcz symmetries of generalised Wintgen ideal Lagrangian submanifolds

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In this talk different kinds of pseudosymmetry curvature conditions in the sense of Deszcz are considered for Lagrangian submanifolds in complex space forms. For Lagrangian submanifolds  $M^n$  in complex space forms  $\tilde{M}^m(4c)$ , an inequality relating the main intrinsic and extrinsic scalar invariants, namely the normalised scalar curvature (intrinsic invariant) and the squared mean curvature and the normalised scalar normal curvature of  $M$  in the ambient space  $\tilde{M}$  (extrinsic invariants) is called *generalised Wintgen inequality*. And a Lagrangian submanifold  $M^n$  is said to be *generalised Wintgen ideal Lagrangian submanifold* of  $\tilde{M}^m(4c)$  when it realises at everyone of its points the equality in such inequality.

Characterizations based on some basic Deszcz symmetries of such generalised Wintgen ideal Lagrangian submanifolds are given.

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