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*A new characterization of the Painleve I equation*

The invariant classification of second-order ordinary differential equation requires the calculation of differential invariants of the infinite-dimensional pseudo-group of point transformations. A basic question then becomes: what jet-order is required for invariant classification? For a given 2nd order equation  $u_{xx} = q(x, u, u_x)$ , we are able to show that the "worst-case" scenario involves 10th order jets of  $q$  and that that the Painlevé-I equation is precisely the simplest instance of such a maximal order equation. Our solution is based on the theory of equivariant moving frames and involves Cartan's notion of duality for 2nd order ODEs.