RAFAEL DE LA ROSA SILVA, Universidad de Cádiz
The natural extension to PDEs of Lie's reduction of order algorithm for ODEs

In this talk, we further consider the symmetry-based method for constructing nonlocally related systems for PDEs. We look at Lie's reduction of order algorithm from a different point of view to show how a given ODE is nonlocally related to its reduced ODE. We show that the natural extension to PDEs of Lie's reduction of order method for ODEs is simply the symmetry-based method for PDEs.