1116-53-263 **Ryad Ghanam\*** (raghanam@vcu.edu), Doha, Qatar. On the inverse problem of systems of second order differential equations.

In this presentation, we go over the algorithm of solving the inverse problem for a system of second order differential equations. We then specialize in solving the problem for the geodesic equations of the canonical connection on low dimensional Lie groups. (Received August 19, 2015)