Contribution ID: **81**                                                      Type: **Talk**

# Beyond General Relativity: The Geometric Deformation and New Black Hole Solutions

*Wednesday 16 December 2015 14:21 (22 minutes)*

In the context of extra-dimensional gravity, as the Randall-Sundrum brane-world, a consistent extension of the minimal geometric deformation approach (MGD) is used to study the exterior spacetime around spherically symmetric self-gravitating system. A modified Schwarzschild geometry is obtained and new black hole solutions are shown. A possible extension of this approach in $F(R)$ theories is also presented.

**Primary author:**   OVALLE, Jorge (Simon Bolivar University)

**Presenter:**   OVALLE, Jorge (Simon Bolivar University)

**Session Classification:**   03 - Modifications of gravity