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Cicero Carvalho* (cicero@ufu.br), Faculdade de Matematica, Av. J.N. Avila, 2121, Uberlandia, MG 38408-100, Brazil. *On codes of Reed-Muller type defined over higher dimensional scrolls.*

In 1988 Lachaud introduced the class of projective Reed-Muller codes, defined by evaluating the space of homogeneous polynomials of a fixed degree on the points of a projective space over a finite field. Since then other classes of codes have been obtained by replacing the points of the projective space by the points of a projective variety. In this talk we would like to present results on a class of codes obtained in this way, where the projective variety is a higher dimensional normal scroll. In a joint work with Victor G.L. Neumann, Xavier Ramirez-Mondragon and Horacio Tapia-Recillas we have determined a formula for the dimension of these codes, and the exact value of the minimum distance in a special case. (Received September 02, 2020)