1114-51-208Oscar Vega* (ovega@csufresno.edu), 5245 North Backer Avenue M/S PB 108, Fresno, CA
93740-8001, and Rolando Pomareda and Nicolas Abarzua. Feet in Buekenhout-Metz
Unitals. Preliminary report.

A unital is a type of block design which when embedded in a (finite) projective plane is an example of a largest possible blocking set. Most of the efforts made to study unitals have been focused on two large families: Classical and Buekenhout-Metz.

Although there exist a considerable amount of literature on Buekenhout-Metz Unitals, not much is known about the substructure formed by the points of tangency on the (tangent) lines through an external point to the unital, which is called the feet of the point. In this presentation we will give a geometric/combinatorial presentation of all feet in Orthogonal-Buekenhout-Metz Unitals. (Received August 27, 2015)