

# A CLOSEDNESS THEOREM OVER HENSELIAN VALUED FIELDS WITH ANALYTIC STRUCTURE

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I wish to establish a closedness theorem over Henselian valued fields with separated analytic structure (of equicharacteristic zero, possibly non algebraically closed) to the effect that every projection with projective fiber is a definably closed map. It remains valid also for valued fields with analytic structure induced by strictly convergent Weierstrass systems, including the classical, complete rank one valued fields with the Tate algebra of strictly convergent power series. This is an analytic counterpart of the algebraic version I achieved before. As application, I prove two theorems on existence of the limit and on piecewise continuity.