

1145-VT-1127 **Na Zhang*** (zhangn4@mail.uc.edu), 45220, and **Lucas Reding** and **Magda Peligrad**. *On the quenched CLT for stationary random fields under projective criteria.*

Motivated by random evolutions which do not start from equilibrium, in a recent work, Peligrad and Volný (2018) showed that the quenched CLT (central limit theorem) holds for ortho-martingale random fields. In this paper, we study the quenched CLT for a class of random fields larger than the ortho-martingales. To get the results, we impose sufficient conditions in terms of projective criteria under which the partial sums of a stationary random field admit an ortho-martingale approximation. More precisely, the sufficient conditions are of the Hannan projective type. As applications, we establish quenched CLT for linear and nonlinear random fields with independent innovations. (Received September 19, 2018)