Universality of transient dynamics and aging for spin glasses

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We consider Random Hopping Time (RHT) dynamics of mean field spin glass models that can be seen as a (random) time change of the simple random walk on the state space. The simplest mean field spin glass is the Random Energy Model (REM) where energy landscape has no correlation structure. We study the dynamics of REM and prove that under a proper normalization the *clock process* (time change process) converges to an extremal process and the system exhibits aging like behavior. Finally, we prove that the same is true for more complex models Sherrington - Kirkpatrick (SK) spin glass and p-spin models.