

## Description of Additional Supplementary Files

**Supplementary Movie 1:** Curve collapsing with critical exponent  $\beta = 5$  and varying  $\overline{\nu}_{\alpha}$  for the positively correlated case close to  $\alpha = 1$ . See Supplementary Note 6 for further details.

**Supplementary Movie 2:** Curve collapsing with critical exponent  $\beta = 16$  and varying  $\overline{\nu}_{\alpha}$  for the positively correlated case close to  $\alpha = 1$ . See Supplementary Note 6 for further details.