

Data Preparation

- Data reduction
 - 100Hz \rightarrow 5Hz
 - Time series of approximately 3,000 data points per dyad
- Displacement scores
 - $\text{Displ}_t = \sqrt{(X_{(t+1)} - X_t)^2 + (Y_{t+1} - Y_t)^2}$
- In a previous study we showed that measures obtained from surrogate and randomized timeseries differ significantly from the observed timeseries (Vink, Wijnants, Cillessen, & Bosman, 2017).

Cross Recurrence Quantification Analysis divad 1001 ?

- Can detect and quantify occurrences of synchronization in bivariate time series in reconstructed phase space (Shockley, 2005).
- Parameters used:
 - Time lag = 5 data points
 - Embedding dimension = 7
 - Recurrence rate = 5%
 - Thus, radius could vary

