1108-60-7Alexander Schnurr* (aschnurr@math.tu-dortmund.de) and Herold Dehling. Detecting
Changes in the Dependence Structure Between two Time-series. Preliminary report.

Using so called ordinal patterns we analyze whether there is a (possibly non-linear) dependence between given time series. If we find a dependence structure, we tackle the question whether this dependence changes over time. Considering short-range or long-range dependent time-series, different techniques are used and different limit theorems are obtained. Applications include time series appearing in mathematical finance, biology, medicine and hydrology. (Received October 10, 2014)