

## PURPOSES

To automate the analysis of time series data from therapy sessions.

To sort good sessions from bad sessions.

To create mathematical models that simulate therapy sessions.

## PREMISES

Tracking how therapy sessions unfold in time adds a new and richer dimension for examining therapeutic interventions.

It is possible to create nonlinear mathematical models of therapy.

## PROMISES

Automating data analysis makes it easier to assess and alter therapeutic interventions.

Mathematical models may be useful for exploring changes in therapies.

The method is content neutral and can be tailored to different styles of therapy.

The thesis includes a mathematical handbook for students who wish to study the dynamics of psychotherapy.

# PSYCHOTHERAPY DATA: TIME SERIES ANALYSIS AND MODELING

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