Reading Assignments for Time-Series Analysis

*Slant font* means “required;” normal font means “optional.”

- **Embedding, in general:**
  1. *section 3 of Liz’s time-series analysis notes.*
  2. *sections 12.4–5 of Strogatz.*
  3. *sections 3.2–3.3 and 9.1–9.2 of Kantz & Schreiber.*
  4. chapter 2 of Abarbanel (on reserve).
  5. “Coping...”, chapters 5 (an overview) and 6 (reprints of journal papers). Also on reserve.
  6. section 2 and 2.1 of Sauer *et al.* (on E-reserves).

- **Finding $d_E$ and $\tau$:**
  1. *chapter 5, sections 11.2 and 12.3.2, and appendix A.5 of Kantz & Schreiber*
  2. *section 3.2 of Liz’s time-series analysis notes.*
  3. chapters 3 and 4 of Abarbanel.
  4. Mindlin and Gilmore; through section 2.2 only. (on E-reserves)

- **Lyapunov exponents:**
  1. *section 3.2 of Liz’s time-series analysis notes.*
  2. *section 10.5 of Strogatz.*
  3. *Liz’s notes on Wolf’s algorithm.*
  4. sections 5.3 and 5.5 of Abarbanel.
  5. “Coping...”, chapters 4 (an overview) and 8 (reprints of journal papers).
  6. sections 3.3-4 of Parker and Chua (on reserve).

- **Fractal dimensions:**
  1. *review sections 11.4 and 11.5 of Strogatz.*
  2. section 5.2 of Abarbanel.
  3. “Coping...”, chapter 7 (reprints of journal papers).
  4. section 7.1 of Parker and Chua (on E-reserves)
     - pp 167–169: overview and definitions
     - pp 177–179: discussion
     - pp 179–181: algorithms