SPM Software & Resources

Wellcome Trust Centre for Neuroimaging
University College London

SPM Course
London, May 2010

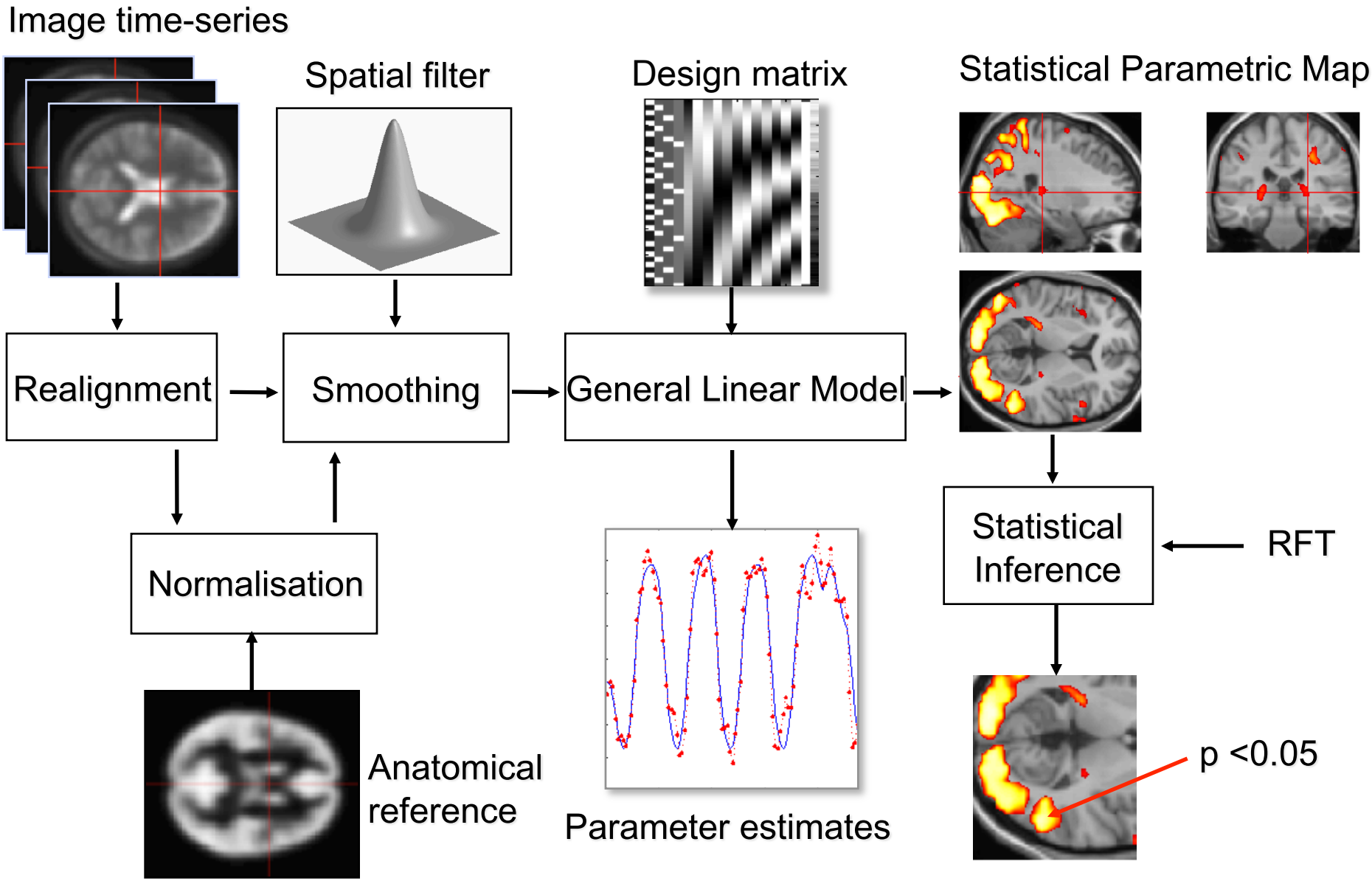
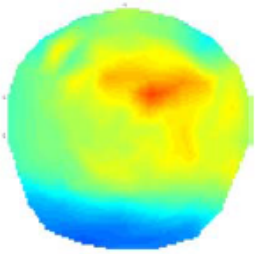
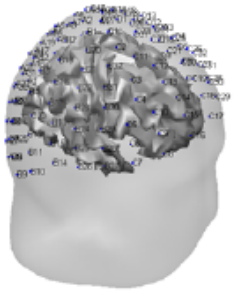
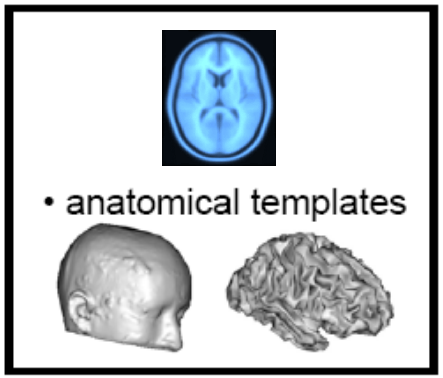
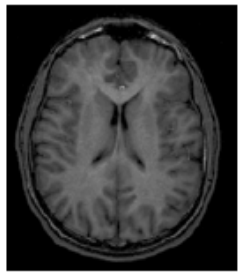


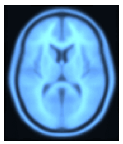
Image time-series
Spatial filter
Design matrix
Statistical Parametric Map
Realignment
Smoothing
General Linear Model
Normalisation
Statistical Inference
RFT
Anatomical reference
Parameter estimates
p <0.05









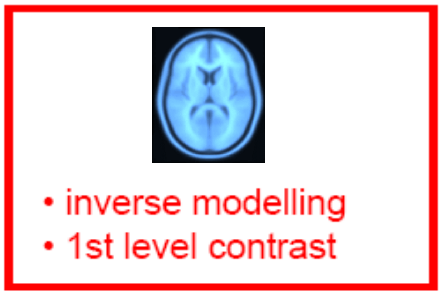


individual meshes

trials

gain matrix

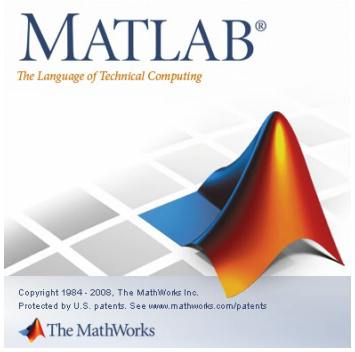
evoked responses



cortical sources

Software: **SPM8**

- Open Source academic freeware (under GPL)
- Documented and informally supported
- Requirements:
  - MATLAB: **7.1** (R14SP3) to **7.10** (R2010a)
    no Mathworks toolboxes required
  - Supported platforms (MEX files):

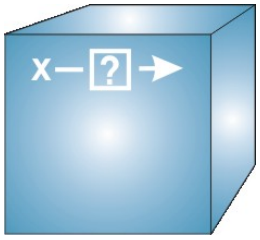


Linux (32 and 64 bit)

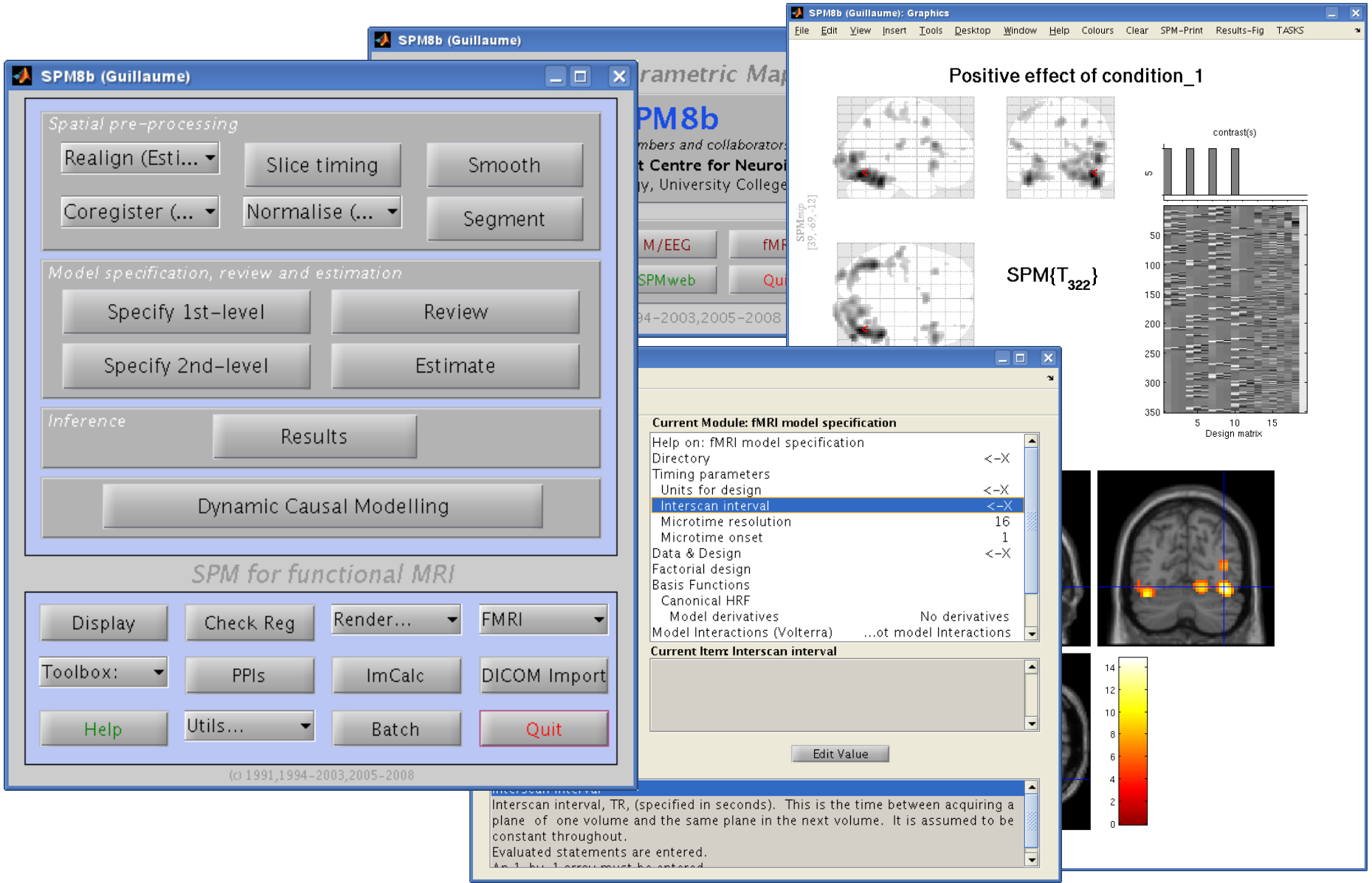
Windows (32 and 64 bit)

Mac Intel (32 and 64 bit)

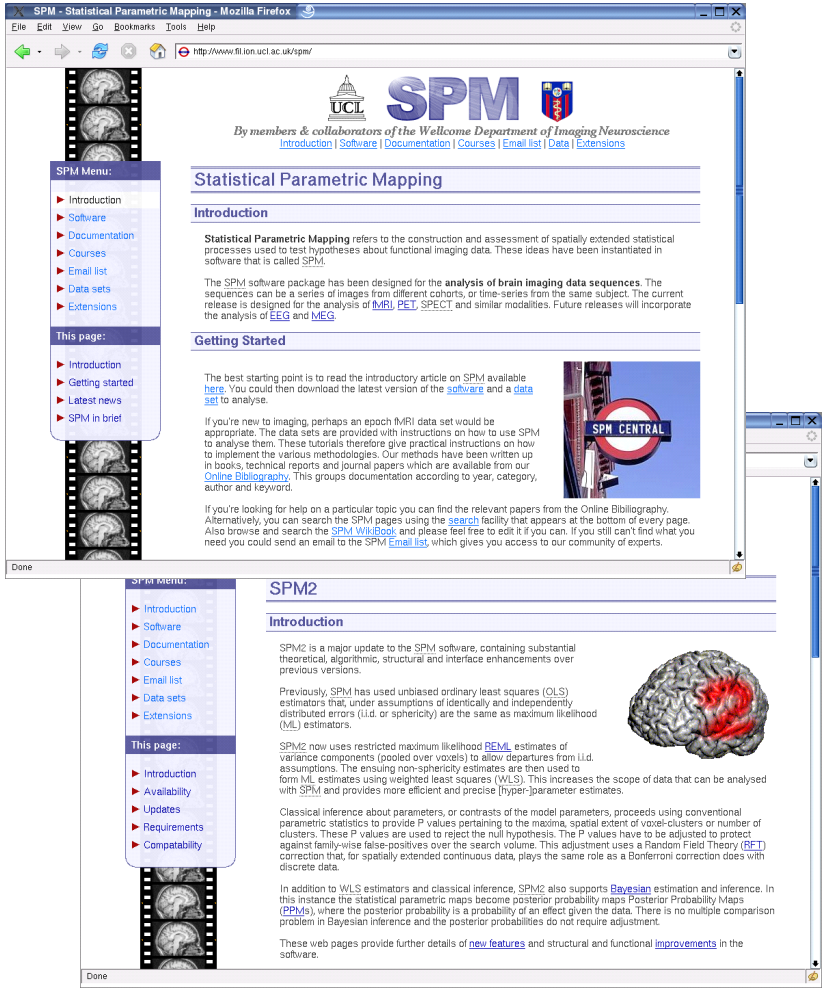
  - File Formats:
    - Images: NIfTI-1 (& Analyze, DICOM)
    - Surface meshes: GIfTI
    - M/EEG: most manufacturers (with FieldTrip's fileio)



SPM Interface



SPMweb



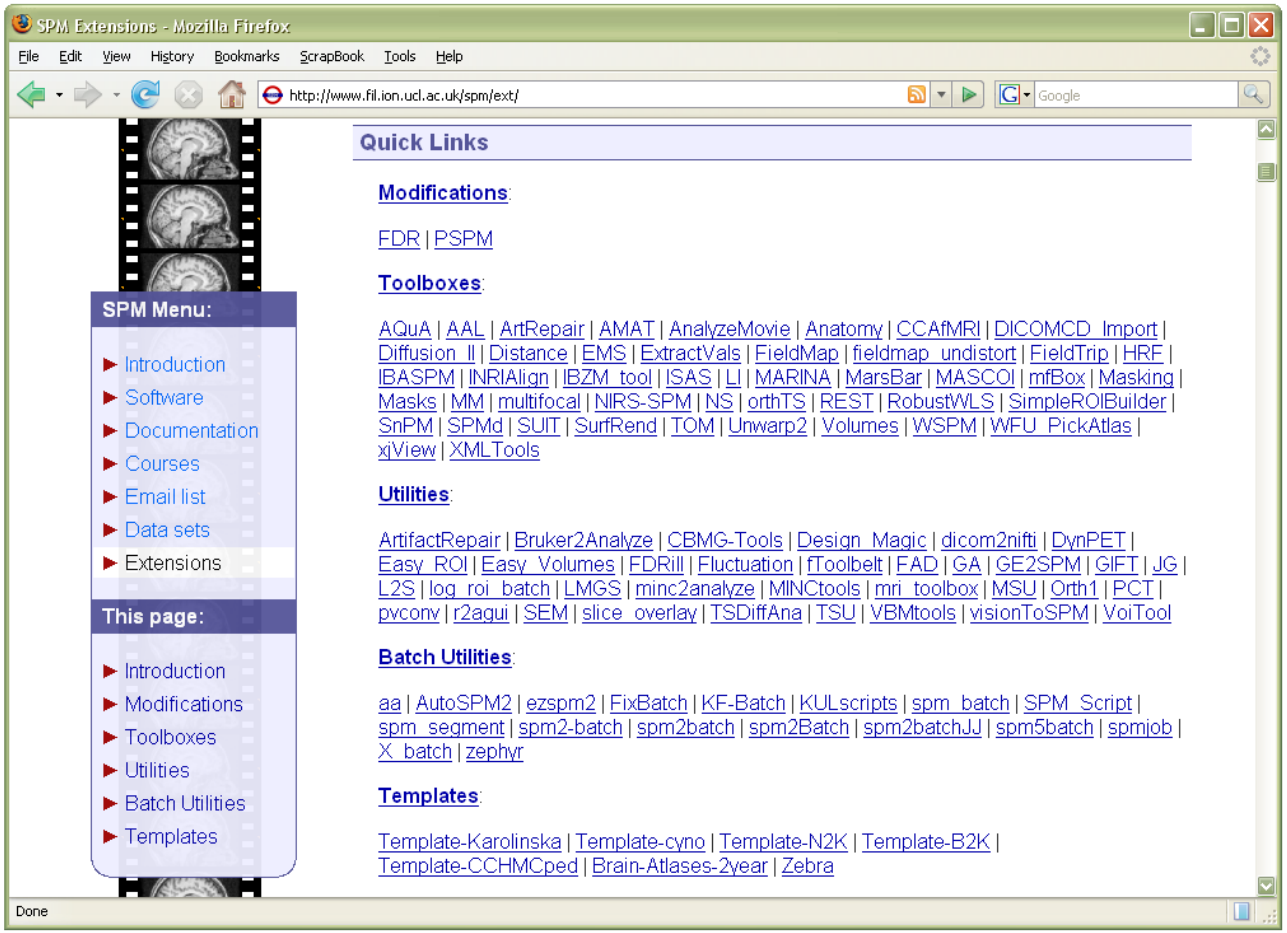
- Introduction to SPM
- SPM distribution: SPM2, SPM5, SPM8
- Documentation & Bibliography
- SPM email discussion list
- SPM short course
- Example data sets
- SPM extensions

http://www.fil.ion.ucl.ac.uk/spm/

SPM Toolboxes

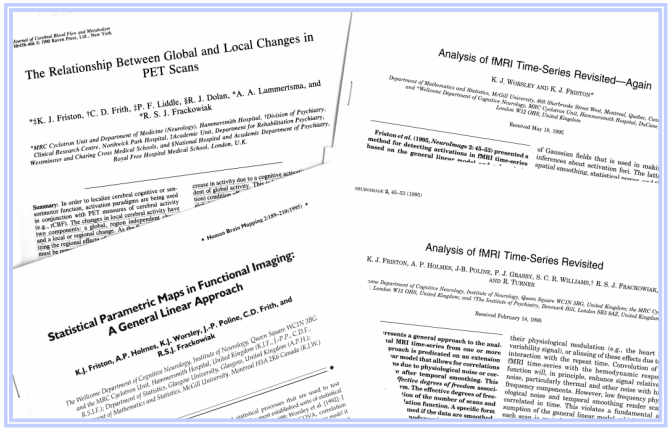
- User-contributed SPM extensions:

http://www.fil.ion.ucl.ac.uk/spm/ext/



SPM Documentation

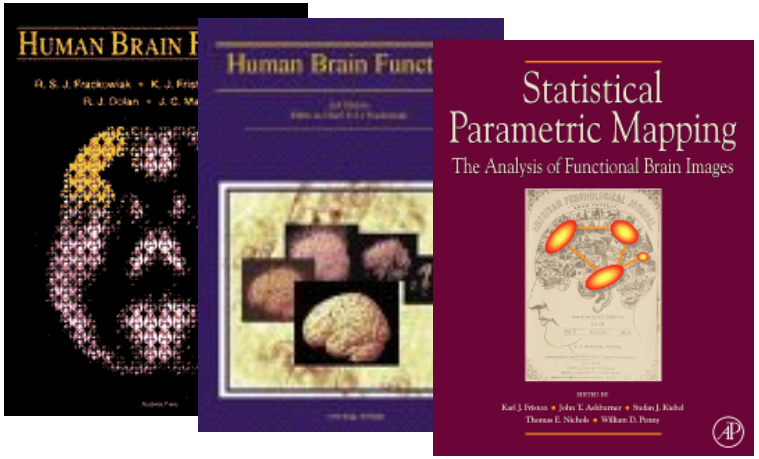
Peer reviewed literature



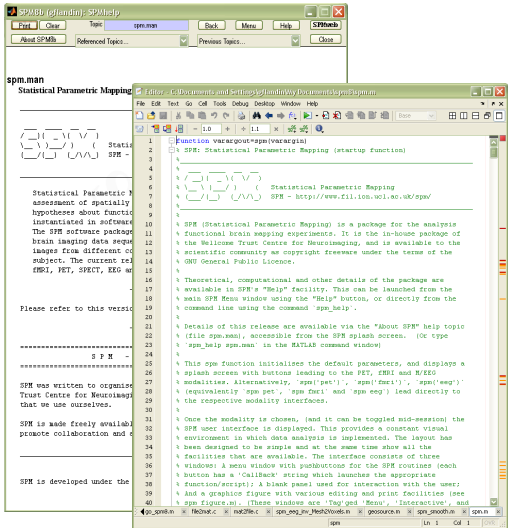
SPM Books:

Human Brain Function I & II

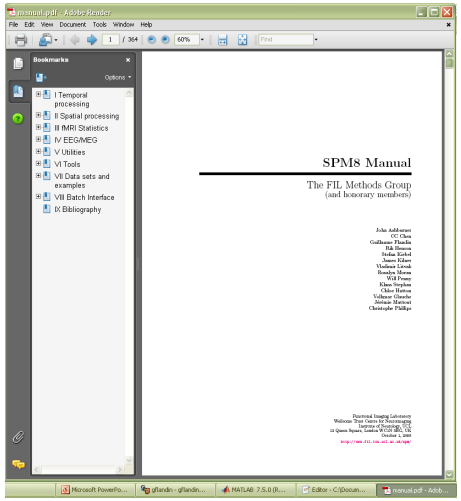
Statistical Parametric Mapping



Online help & function descriptions



SPM Manual



SPM Online Bibliography

External Resources

- **SPM @ Wikipedia**

  http://en.wikipedia.org/wiki/Statistical_parametric_mapping

- **SPM @ *Scholarpedia***

  http://www.scholarpedia.org/article/SPM

- **SPM @ WikiBooks**

  http://en.wikibooks.org/wiki/SPM

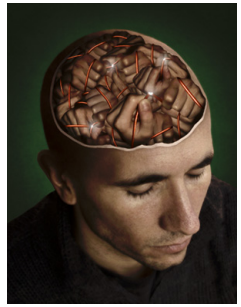
- **MRC-CBU Imaging/MEG wiki**

  http://imaging.mrc-cbu.cam.ac.uk/imaging/CbuImaging

  http://imaging.mrc-cbu.cam.ac.uk/meg

- **SPM @ NITRC**

  http://www.nitrc.org/projects/spm/



SPM Mailing List

- *spm@jiscmail.ac.uk*
- Web home page
  - *http://www.fil.ion.ucl.ac.uk/spm/support/*
  - Archives, archive searches, instructions
- Subscribe
  - *http://www.jiscmail.ac.uk/*
  - email *jiscmail@jiscmail.ac.uk*
  - join spm Firstname Lastname
- Participate & learn
  - email *spm@jiscmail.ac.uk*
  - Monitored by SPMauthors
  - Usage queries, theoretical discussions, bug reports, patches, techniques, &c…