

Release Notes

Brain Dynamics Toolbox

Version 2017a

Released 21 March 2017.

Requires Matlab 2014b or newer.

Major new features: (1) Dynamic loading of GUI plot panels. (2) Enhanced GUI class properties allow the solver output and panel objects to be accessed directly. (3) New *sys* struct has a more flexible syntax for defining system parameters and variables. (4) Improved validation of *sys* structs. (6) Time and Phase portraits now support graphic hold. (7) All example models have been revised.

This version is not backwards compatible with version 2016a. In particular: (1) *sys.pardef*, *sys.vardef*, *sys.auxdef*, *sys.lagdef* were changed from cell arrays to struct arrays; (2) *sys.gui* was renamed *sys.panels*; (3) SDE function handles were renamed *sys.sdeF* and *sys.sdeG*; (4) *bdCorrelationPanel* was renamed *bdCorrPanel*; (5) *bdSpaceTimePortrait* was renamed *bdSpaceTime*; (6) *odeEuler* was renamed *odeEul*; (7) *sdelto* was renamed *sdeEM*; (8) *sdeStratonovich* was renamed *sdeSH*; (9) *bdVerify* was renamed *bdSysCheck*; (10) *bdUtils* was renamed *bd*; (11) The *gui.control* property was replaced by *gui.sys*, *gui.sol* and *gui.sox*. (12) The *sys* fields *tspan*, *odesolver*, *odeoption*, *ddeolver* and *ddeoption* are no longer mandatory.

Important message to users migrating from 2016a to 2017a. Scripts written for 2016a will need to be modified to accommodate the changes above. We recommend using *bdSysCheck* when migrating old code. It will quickly detect obsolete and invalid fields in existing *sys* structures.

Version 2016a

Released 24 Dec 2016.

Requires Matlab 2014b or newer.

This version is the first public release of the Brain Dynamics Toolbox.