

SBMLToolbox

for MATLAB®

Sarah M. Keating

Ben Bornstein

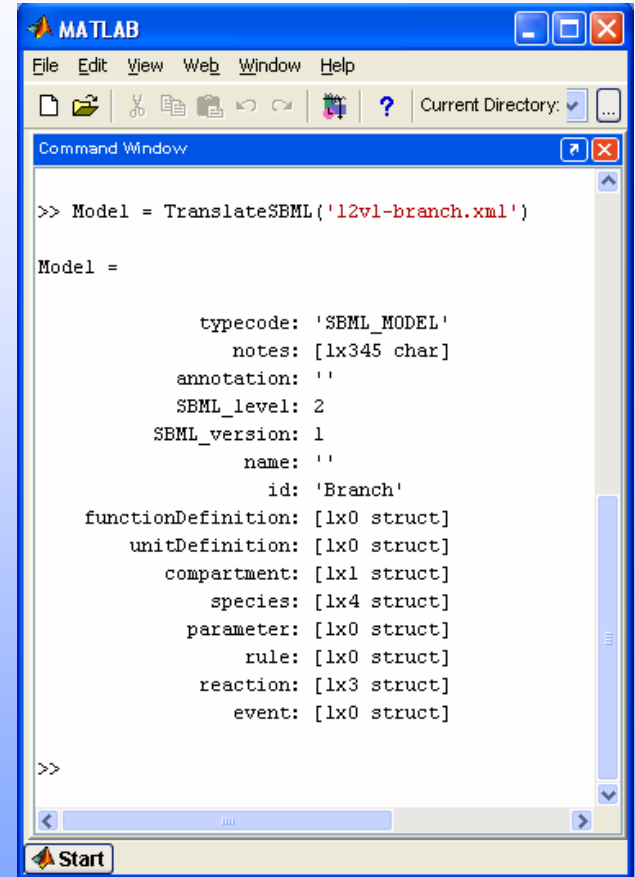
Distributed freely under the terms
of the GNU LGPL

Release: 1.0.2



The Systems Biology
Markup Language

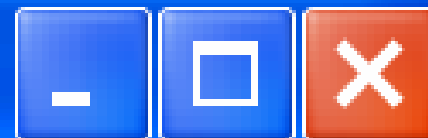
www.sbml.org



A screenshot of the MATLAB Command Window. The window title is 'MATLAB'. The menu bar includes 'File', 'Edit', 'View', 'Web', 'Window', and 'Help'. The toolbar shows icons for file operations and a 'Current Directory' dropdown. The Command Window contains the following text:

```
>> Model = TranslateSBML('l2v1-branch.xml')  
  
Model =  
  
          typecode: 'SBML_MODEL'  
          notes: [1x345 char]  
    annotation: ''  
    SBML_level: 2  
    SBML_version: 1  
          name: ''  
          id: 'Branch'  
functionDefinition: [1x0 struct]  
    unitDefinition: [1x0 struct]  
    compartment: [1x1 struct]  
    species: [1x4 struct]  
    parameter: [1x0 struct]  
          rule: [1x0 struct]  
    reaction: [1x3 struct]  
    event: [1x0 struct]  
  
>>
```

The window also shows a 'Start' button at the bottom left.



File Edit View Web Window Help

Current Directory: C:\MATLAB6p5p1\work

Command Window

```
>> [speciesValues, parameterValues] = CheckValues(Model)
```

 Start

parameterVa

0.0150

```
>>
```

kappa_Reaction1

0.015

kappa_Reaction1

k6_Reaction2

k4_Reaction3

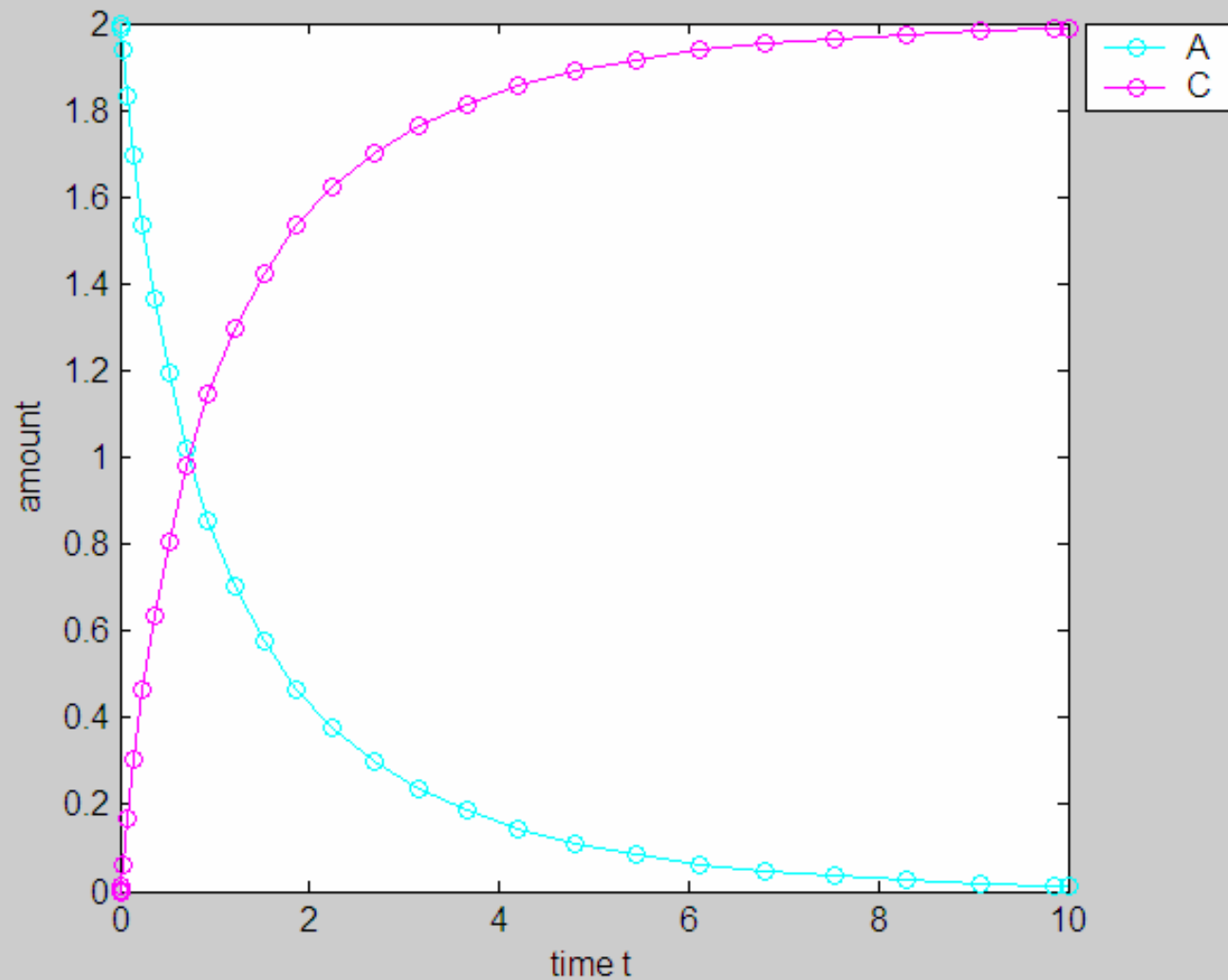
k4prime_Reaction3

Cancel

 Start

Figure No. 1

File Edit View Insert Tools Window Help



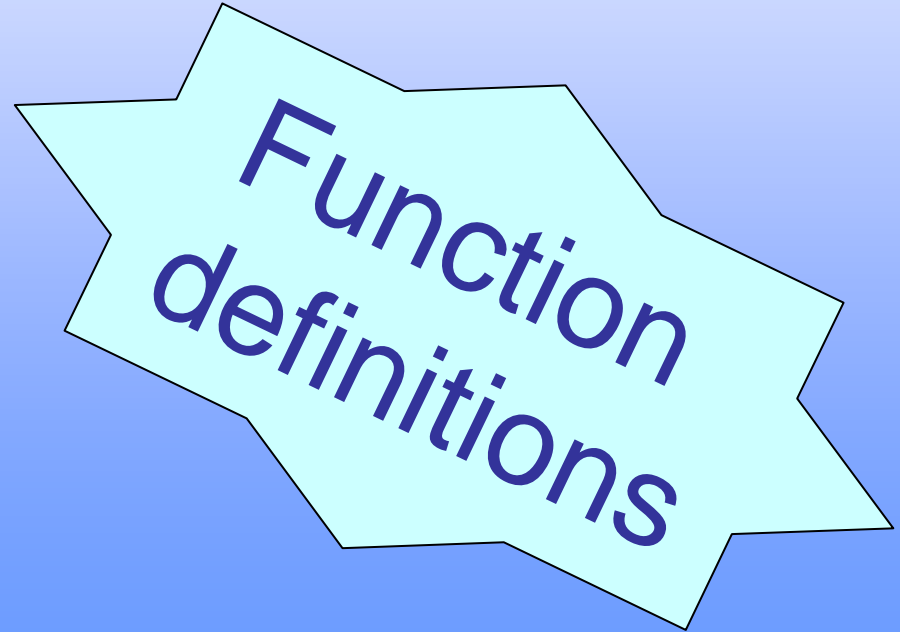
An orange starburst shape with multiple points, containing the word "Events" in blue text.

Events

Forthcoming features

A light blue ribbon-like shape with wavy edges, containing the word "Rules" in blue text.

Rules

A light cyan starburst shape with multiple points, containing the words "Function definitions" in blue text.

Function
definitions

Mimic
libSBML API

Forthcoming features

Translate
existing
MATLAB ODEs
to SBML



Semantic test suite



Testing



Development

Basic
reactions

SBMLToolbox
“passes”

Use models to
implement
new features

Download from <http://sbml.org>

Free

