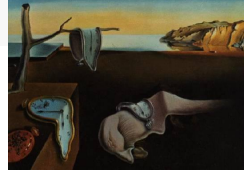```
Loading required package: gppm
Warning in library(package, lib.loc = lib.loc, character.only
                 return = TRUE, : there is no package called 'gppm'
```

# Gaussian Process Panel Modeling in R

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## Abstract

TODO

*Keywords*: JSS, style guide, comma-separated, not capitalized, R.

# 1. Introduction

# 2. Gaussian Process Panel Modeling

# 3. gppm Package

## 3.1. Data format

The **gppm** requires data frames as input. The data frames need to be in the long-format.In the long-format each row in the data frame describes the data for one person at one time point. Thus, there are typically multiple rows for each person. An example for a data frame in the long-format can be found in the demo file demoLGCM. The first 6 rows of demoLGCM look like this:

```
  ID     t    x
1  1 1.876 14.2
2  1 1.771 17.9
3  2 0.789 19.5
4  2 3.317 18.6
5  2 2.393 17.5
6  2 4.667 17.6
```

Thus, the first row describes person 1 the first measurement took place at time point 1.876 and was 14.157.

The parsers automatically regocnizes that *muI* refers to a parameter, *t* to an observed value in the data frame, and *+* to a mathematical operator. Thus, the parameters are defined implicetely via the mean and the kernel functions.

3.3. Model fitting

3.4. Extracting results

4. Illustrations

5. Summary and discussion

▌ As usual . . .

Computational details

The results in this paper were obtained using R 3.4.1 with the **MASS** 7.3.47 package. R itself and all packages used are available from the Comprehensive R Archive Network (CRAN) at https://CRAN.R-project.org/.

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A. More technical details

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