

# R Package **stsm**

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## Abstract

This is a minimal introduction to package **stsm**. Further information is available in the references given below.

## 1 Introduction

The example below fits the basic structural time series model to the airlines passengers data.

```
> library("stsm")
> m <- stsm.model(model = "BSM", y = log(AirPassengers), transPars = "StructTS")
> res <- maxlik.td.optim(m = m, KF.args = list(POcov = TRUE), method = "L-BFGS-B")
> round(get.pars(res$model) * 10000, 3)

    var1    var2    var3    var4
0.000    7.719    0.000   13.969
```

Details about the methodology and algorithms implemented in the package are given [in this document](#).

As a preliminary introduction and discussion see these posts: [optimization algorithms to fit a structural time series model](#) and [variations on a maximum likelihood procedure](#).