1023-40-227 **Bruno Salvy\*** (Bruno.Salvy@inria.fr), Algorithms Project, INRIA Rocquencourt, 78153 Le Chesnay, France. *GFUN: 15 years later*.

Gfun is a Maple package devoted to the study of sequences that are solutions of linear recurrences. It combines tools that deal with linear recurrences and linear differential equations with "guessing" functionality that have proved very useful in experimental work. The first version of gfun was written in 1992. We shall give an overview of the types of applications of this package, of the algorithms "under the hood" and their progress in the past 15 years. (Received August 28, 2006)