STATISTICAL MODELS FOR TOURISM FLOWS ESTIMATION

Roberto Fontana and Giovanni Pistone

Dipartimento di Matematica
Politecnico di Torino
Corso Duca degli Abruzzi,24
10129 Torino, Italy
roberto.fontana@polito.it, giovanni.pistone@polito.it

Abstract  Tourism is a complex and highly competitive sector. In this scenario incoming tourism flows represent one of the key indicators for public institutions, that wish to adopt an informed decision making process for resource allocation. The accurate and timely knowledge of both the interregional and the foreign component at a sufficiently detailed geographical level of such flows allows a better strategical, tactical and operational planning of marketing activities.

The paper describes a methodology to complete the database of the official statistical data on tourism flows with an estimate of missing data, that are originated by non respondent accommodation structure. The methodology has been applied to the inbound tourism flows into Piedmont.

Keywords Generalized Linear Models, Tourism statistics, Bednights