

FOREWORD TO THE CONTRIBUTIONS BY TWO EATCS AWARD-RECIPIENTS

Luca Aceto
President of the EATCS
School of Computer Science,
Reykjavik University, Iceland

Every year, the EATCS presents its awards to some of the many outstanding members of the theoretical-computer-science community. These awards put the work of some of our colleagues, as well as the research areas to which they have contributed, in the spotlight and serve as an inspiration for our community at large, and for young researchers in particular.

The two survey articles that appear in this part of the October 2014 issue of the Bulletin have been kindly contributed by David P. Woodruff, who received the 2014 Presburger Award at ICALP 2014 in Copenhagen, and by Andrea Marino, who was one of the two recipients of the annual Doctoral Research Awards of the Italian Chapter of the EATCS.

David P. Woodruff's piece gives a short survey of his work on data streams and its applications to fields as diverse as communication complexity, numerical linear algebra and sparse recovery. Data streams are ubiquitous in modern-day computing and their algorithmic analysis poses many challenges, which David's work has contributed to solving. The goal of David's article is to give a non-technical overview of results on data streams and to highlight connections between its different fields of application. You can watch his Presburger Award lecture given at ICALP 2014 at the following URL.

[http://icalp2014.itu.dk/icalp2014/Conference/Program/
Best-Papers-EATCS-Presburger-Awards](http://icalp2014.itu.dk/icalp2014/Conference/Program/Best-Papers-EATCS-Presburger-Awards)

Andrea Marino's article briefly surveys the work described in full detail in his award-receiving doctoral dissertation and in the publications on which the thesis was based. In his piece, Andrea describes algorithms for enumerating and analyzing the solutions to some graph-theoretic problems that are inspired by the study of biological networks. Do read it if you want to know what bubbles and stories in biological graphs are and how to enumerate them.

On behalf of the readers of the Bulletin, I thank Andrea and David for taking the time to write these survey articles on their work. I trust that these pieces will help to make their work accessible to a wide readership and to increase its impact even further.