

REPORT ON STRINGMASTERS 2013

20-23 February 2013, Verona, Italy

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The **11th edition of the StringMasters workshop** took place from 20 to 23 February 2013 in the beautiful northern Italian city of Verona. In total, 27 participants from 11 countries came to Verona for this workshop, in order to spend a few days together working intensively on open problems in stringology. The website of the workshop is:

<http://stringmasters.di.univr.it>.

StringMasters has taken place since 2007, once to three times per year. Previous venues were Hamilton (Canada), Stellenbosch (South Africa), Perth (Australia), London (UK), Rouen (France), and Palermo (Italy). The workshop aims at bringing together researchers of different levels (senior, junior, graduate students), reinforcing existing collaborations, and forming new ones. Topics include all areas of stringology, spanning **algorithms on strings, combinatorics on words, and applications of strings (such as in bioinformatics, musical analysis, internet issues, data mining, natural language processing, and others)**.

The format emphasizes free collaboration. There is no formal program; the workshop starts with the presentation of open problems, and in the following participants are encouraged to form small groups, in which to attack a chosen problem. There are several rooms available for working, and participants are free to

switch between groups at any time. If groups have found their collaboration fruitful, they continue after the end of workshop via email and other means of communication. Special issues of high level journals are regularly devoted to results stemming from these workshops. StringMasters' steering committee consists of **Maxime Crochemore**, **Costas Iliopoulos**, and **William F. Smyth**. See also the central StringMasters website:

www.stringmasters.org.

This time the workshop kicked off with a short introductory round, and then 11 open problems were presented by participants. Most of these elicited a lot of interest. Of course, scheduling time slots for problems optimally, according to participants' expressed interest, under room and time constraints, is an NP-hard problem. So after a first tentative schedule offered by the organizers (with no approximation guarantee), from day 2, the workshop's credo was: "Self-organize!" And indeed, participants succeeded in forming groups according to problems; during the three and a half days of the workshop, most if not all of the initial problems were attacked (and some solved). These included problems on jumbled pattern matching, abelian factors, periods and squares and runs in words, indeterminate words, compression, and several others.

The workshop took place at the **Department of Computer Science, University of Verona**, and was organised by **Giuditta Franco** and **Zsuzsanna Lipták**, of the Verona Bioinformatics group. Four rooms were at free disposal of the workshop, in one of which coffee, cookies, and fruit were served in the late mornings. The department lies in the southern part of town, an easy bus ride away from the medieval centre, where most participants lodged. The social dinner was held in a desanctified church in the old part of town. Verona is arguably one of the most beautiful towns in Italy, with a Roman amphitheatre (the Arena), splendid churches and towers, medieval bridges giving breathtaking views of the river Adige—which forms a loop (some say: heart) around the old town. On Saturday morning there was a museum visit with a guided tour organised for participants (thanks to Travis Gagie).

Among the 27 participants, there were researchers of all levels: senior, junior (postdoc), as well as 5 PhD students and 1 masters student. The countries of origin of the participants were:

Australia (1), Canada (1), Czech Republic (2), Finland (1),
France (2), Germany (2), Hungary (1), Italy (6), Poland (2),
South Africa (1), UK (8).

The organisers wish to thank the Department of Computer Science, University of Verona, for the financial and logistic support of StringMasters 2013.

There will be a **special issue of the Journal of Discrete Algorithms** devoted to results stemming from the StringMasters workshops in 2012 and 2013, edited by Maxime Crochemore, Jacqueline Daykin, and Zsuzsanna Lipták.

The next StringMasters will take place in **Prague from Sept 5-7, 2013**, right after the Prague Stringology Conference (PSC 2013).