

Report on WCB05: Workshop on Constraint Based Methods for Bioinformatics

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This workshop is the successors of the workshops *Constraints and Bioinformatics/Biocomputing* held in CP'97 and CP'98. After those meetings a lot of work has been done in the area. This workshop was conceived to allow to sum up the situation and to produce new stimulus for the research. We received 10 valuable submissions. 8 of them have been accepted and successfully presented. Even if scheduled in the afternoon of the last day, a lot of people attended at the talks (we counted 33 people, with an average presence close to 25), some of them from (constraint) logic programming (e.g., Maurice Bruynooghe, Veronica Dahl, Pierre Flener, Enrico Pontelli, Peter Stuckey) and others from Bioinformatics (e.g., Tony Kusalik), and Information Theory (e.g., Andrea Sgarro). Each talk has been very appreciated by participants, as witnessed by the several questions raised (more than 4 questions per paper, in average). The main topics presented and discussed were about *RNA Structure Design*, *Local/Multiple alignment*, and *System Biology*, which are current hot topics in this field. Note that e.g. several PC members have recently presented new results in the area of constraints and bioinformatics (e.g. on protein folding/docking, which is another hot topic in bioinformatics) in several conferences like PPDP, CP, and LPAR. Due to time limits, these contributions where not presented on the workshop.

Bioinformatics is a challenging research area where every major contribution can have significant impact on medicine, agriculture, and industry. But results need to be known in those areas. One of the suggestions emerged in the final

discussions is to try to spread our results in bioinformatics conferences. This will show the powerful of constraint-based methods to that community and, possibly, to understand the limits (if any) of our approaches when applied to real-world applications. Anyway, the participants seem to have enjoyed the workshop and they kindly suggested us to organize a new edition for next year (connected with ICLP or CP—actually CP could be more suited). Since the huge interest and number of participants, the next time we will ask for a full-day workshop. We conclude by acknowledging the PC members, the external referees, all the participants, the ICLP workshop chair Hai-Feng Guo, and the local organizers in Sitges. Other information, pictures from the workshop, and the proceedings can be found in the workshop web-site <http://www.dimi.uniud.it/dovier/WCB05>.