

PROGRAM

Data Compression Conference (DCC 2019)

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Snowbird, Utah, March 26 - March 29, 2019

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SCHEDULE OVERVIEW:

Tuesday Evening, March 26:

Registration and Reception (7pm - 10pm)

Wednesday, March 27:

Morning: Technical Sessions 1,2,3 (8:00am - 12:40am)
Mid-Day: Keynote Speaker (2:30pm - 3:30pm)
Afternoon: Technical Sessions 4,5 (4:00pm - 7:00pm)

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¹National Research University Higher School of Economics,
²Université de Lorraine, CNRS, Inria

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WEDNESDAY MID-DAY

Keynote Speaker

2:30pm - 3:30pm

**25 Years of the BWT:
The Past and the Future of an Unusual Compressor**

Giovanni Manzini

*Professor, Department of Science and Technological Innovation,
University of Eastern Piedmont,
Alessandria, Italy*

The "Block sorting data compression algorithm" by Mike Burrows and David Wheeler is certainly an unusual compressor. Considered initially by the authors too slow for practical use, it became an everyday tool for lossless compression thanks only to skillful algorithmic engineering.

Eventually, as it is natural, other compressors started outperforming block sorting, but the reversible transformation designed "to make redundancy in the input more accessible", which is at the core of this algorithm, turned out to be an extremely powerful conceptual tool that is still deeply influencing data structure design.

In this talk we try to understand why this transformation is so special, how it has been generalized to work on data quite different from simple sequences, and what are the possible directions for future research.

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