

SPIRE 2019 - PROGRAMME

Day	Hour	Session	Title	Authors	
Monday 7th	9:00	Registration			
	9:30	Opening			
	10:00	S1	Data Compression	[R] Approximation ratios of RePair, LongestMatch and Greedy on unary strings	Danny Hucke
	-			[R] Lossless Image Compression Using List Update Algorithms	Arezoo Abdollahi, Neil Bruce, Shahin Kamali and Rezaul Karim
	11:00			[S] Rpair: Scaling up RePair with Rsync	Travis Gagie, Tomohiro I, Giovanni Manzini, Gonzalo Navarro, Hiroshi Sakamoto and Yoshimasa Takabatake
	11:00	coffee			
	11:30	S2	Information Retrieval	[R] Position Bias Estimation for Unbiased Learning-to-Rank in eCommerce Search	Grigor Aslanyan and Utkarsh Porwal
	-			[R] BM25 Beyond Query-Document Similarity	Billel Aklouche, Ibrahim Bounhas and Yahya Slimani
	12:30			[S] Network-Based Pooling for Topic Modeling on Microblog Content	Anais Ollagnier and Hywel Williams
	12:30	Invited Talk :: Alistair Moffat :: C/W/L Spells "Cool": User-Based Evaluation in Information Retrieval			
	13:30	LUNCH			
	-	-	-	[R] Bounds and Estimates on the Average Edit Distance	Michele Schimd and Gianfranco Bilardi
	15:30	S3	String Algorithms	[R] Compact Data Structures for Shortest Unique Substring Queries	Takuya Mieno, Dominik Köppl, Yuto Nakashima, Shunsuke Inenaga, Hideo Bannai and Masayuki Takeda
	-			[R] Fast Cartesian Tree Matching	Siwoo Song, Cheol Ryu, Simone Faro, Thierry Lecroq and Kunsoo Park
17:00	[R] Inducing the Lyndon Array			Felipe A. Louza, Sabrina Mantaci, Giovanni Manzini, Marinella Sciortino and Guilherme P. Telles	
17:00	GUIDED VISIT :: Segovia and the Alcázar				
Tuesday 8th	8:50	Registration			
	-	-	[S] Minimal Absent Words in Rooted and Unrooted Trees	Gabriele Fici and Pawel Gawrychowski	
	-	-	[R] On Longest Common Property Preserved Substring Queries	Kazuki Kai, Yuto Nakashima, Shunsuke Inenaga, Hideo Bannai, Masayuki Takeda and Tomasz Kociumaka	
	9:00	S4	String Algorithms	[R] Online Algorithms on Antipowers and Antiperiods	Mai Alzamel, Alessio Conte, Daniele Greco, Veronica Guerrini, Costas Iliopoulos, Nadia Pisanti, Nicola Prezza, Giulia Punzi and Giovanna Rosone
	-			[R] Polynomial-Delay Enumeration of Maximal Common Subsequences	Alessio Conte, Roberto Grossi, Giulia Punzi and Takeaki Uno
	11:00			[R] Searching Runs in Streams	Oleg Merkurev and Arseny Shur
	-			[R] Weighted Shortest Common Supersequence Problem Revisited	Panagiotis Charalampopoulos, Tomasz Kociumaka, Solon Pissis, Jakub Radoszewski, Wojciech Rytter, Juliusz Straszynski, Tomasz Waleń and Wiktor Zuba
	11:00	coffee			
	11:30	S5	Algorithms	[R] Fast Identification of Heavy Hitters by Cached and Packed Group Testing	Yusaku Kaneta, Takeaki Uno and Hiroki Arimura
	-			[S] Range Shortest Unique Substring Queries	Paniz Abedin, Arnab Ganguly, Solon Pissis and Sharma Thankachan
	12:30			[S] An Optimal Algorithm to Find Champions of Tournament Graphs	Lorenzo Beretta, Franco Maria Nardini, Roberto Trani and Rossano Venturini
	-			[S] A new Linear-time Algorithm for Centroid Decomposition	Davide Della Giustina, Nicola Prezza and Rossano Venturini
	12:30	Invited Talk :: Veli Mäkinen :: When Stringology Meets Graphs			
	13:30	LUNCH			
15:30	S6	Computational Biology	[R] COBS: a Compact Bit-Sliced Signature Index	Timo Bingmann, Phelim Bradley, Florian Gauger and Zamin Iqbal	
-			[R] An Index for Sequencing Reads Based on The Colored de Bruijn Graph	Diego Diaz	
17:00			[R] Linear Time Maximum Segmentation problems in Column Stream Model	Bastien Cazaux, Dmitry Kosolobov, Veli Mäkinen and Tuukka Norri	
-			[R] Space-Efficient Merging of Succinct de Bruijn Graphs	Lavinia Egidi, Felipe A. Louza and Giovanni Manzini	
17:00	coffee				
17:30-	Business Meeting				
21:00	Conference Banquet				
Wednesday 9th	9:20	Registration			
	-	-	[R] Run-Length Encoding in a Finite Universe	N. Jesper Larsson	
	-	-	[S] On the computation of longest previous non-overlapping factors	Enno Ohlebusch and Pascal Weber	
	9:30	S7	Indexing and Compression	[R] Direct Linear Time Construction of Parameterized Suffix and LCP Arrays for Constant Alphabets	Noriki Fujisato, Yuto Nakashima, Shunsuke Inenaga, Hideo Bannai and Masayuki Takeda
	-			[R] Parallel External Memory Wavelet Tree and Wavelet Matrix Construction	Jonas Ellert and Florian Kurpicz
	11:00			[S] SACABench: Benchmarking Suffix Array Construction	Johannes Bahne, Nico Bertram, Marvin Böcker, Jonas Bode, Johannes Fischer, Hermann Foot, Florian Grieskamp, Florian Kurpicz, Marvin Löbel, Oliver Magiera, Rosa Pink, David Piper and Christopher Poeplau
	11:00	coffee			
	11:30	S8	Compressed Data Structures	[R] Faster Dynamic Compressed \$d\$-ary Relations	Diego Arroyuelo, Guillermo De Bernardo, Travis Gagie and Gonzalo Navarro
	-			[R] Faster Repetition-Aware Compressed Suffix Trees based on Block Trees	Manuel Cáceres and Gonzalo Navarro
	12:30			[R] A Practical Alphabet-Partitioning Rank/Select Data Structure	Diego Arroyuelo and Erick Sepúlveda
	12:30	Invited Talk: Gonzalo Navarro: Repetitiveness and Indexability			
	13:30	LUNCH			
	15:30	S9	Compressed Data Structures	[R] Adaptive Succinctness	Diego Arroyuelo and Rajeev Raman
	-			[R] Fast, Small, and Simple Document Listing on Repetitive Text Collections	Dustin Cobas and Gonzalo Navarro
17:00	[R] Implementing the Topological Model Succinctly			Jose Fuentes, Gonzalo Navarro and Diego Seco	
-	-	-	[R] Space- and Time-Efficient Storage of LiDAR Point Clouds	Susana Ladra, Miguel R. Luaces, Jose R. Parama and Fernando Silva-Coira	
17:00	CLOSING				