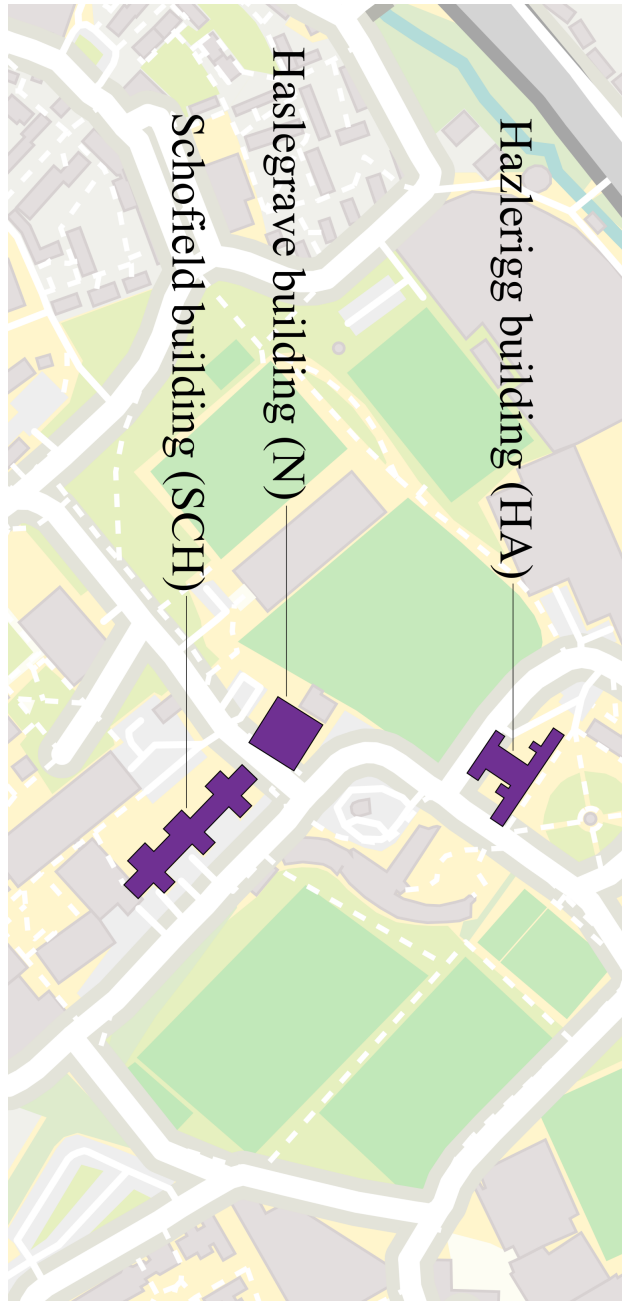
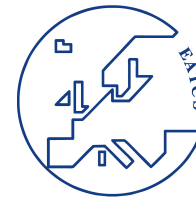


For internet access, use **eduroam** or connect to the **Imago** Wi-Fi network and register using the Wi-Fi code **2306**.



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12th International Conference on Words

# Words 2019

Loughborough University  
9 September – 13 September 2019



# Programme

## Monday, 9 September

2:00 pm, Registration (Schofield Building)

2:45 - 3:00 pm, Opening

3:00 – 4:00 pm, **Session 1** (chair: *Jean Néraud*)

3:00 Binary intersection revisited (*Holub*)

3:30 Circularly squarefree words and unbordered conjugates: a new approach (*Clokie, Gabric, Shallit*)

4:00 – 4:30 pm, Coffee Break

4:30 – 5:30 pm, **Session 2** (chair: *Jamie Simpson*)

4:30 Parikh determinants (*Atanasiu, Poovanandran, Teh*)

5:00 Localisation-resistant random words with small alphabet (*Gavoille, Kachigar, Zémor*)

5:45 – 6:45 pm, Drinks Reception (Hazlerigg Building)

## Tuesday, 10 September

9:15 – 10:15 am, **Invited Talk 1** (chair: *Florin Manea*)

*Gwenaël Richomme*  $S$ -adicity and property preserving morphisms

10:15 – 10:45 pm, Coffee Break

10:45 – 12:15 am, **Session 3** (chair: *Svetlana Puzynina*)

10:45 Critical exponent of infinite balanced words via the Pell number system (*Baranwal, Shallit*)

11:15 Every nonnegative real number is a critical abelian exponent (Peltomäki, Whiteland)

11:45 Generalized Lyndon factorizations of infinite words (*Burcroff, Winsor*)

12:15 – 2:00 pm, Lunch Break

2:00 – 3:00 pm, **Invited Talk 2** (chair: *Joel Day*)

*Florin Manea* Matching Patterns with Variables

3:00 – 3:30 pm, Coffee Break

3:30 – 5:00 pm, **Session 4** (chair: *Gwenaël Richomme*)

3:30 The undirected repetition threshold (*Currie, Mol*)

4:00 Repetitions in infinite palindrome-rich words (*Baranwal, Shallit*)

4:30 Rich Words Containing Two Given Factors (*Rukavicka*)

## Wednesday, 11 September

9:15 – 10:15 am, **Session 5** (chair: *Manfred Kufleitner*)

9:15 Mortality and synchronization of unambiguous finite automata (*Ryzhikov*)

9:45 On codeword lengths guaranteeing synchronization (*Gusev, Pribavkina*)

10:15 – 10:45 am, Coffee Break

10:45 – 12:15 pm, **In memoriam: Aldo de Luca** (chair: *Juhani Karhumäki*)

*Antonio Restivo* On Sets of Words of Rank Two

11:45 Presentation by *Alessandro De Luca*

12:15 – 1:30 pm, Lunch Break

1:30 – 5:30 pm, **Social Event** (Stoneywell, National Trust)

6:45 pm, Conference Dinner (Hazlerigg Building)

## Thursday, 12 September

9:15 – 10:15 am, **Invited Talk 4** (chair: *Štěpán Holub*)

*Aleksi Saarela* Independent Systems of Word Equations: From Ehrenfeucht to Eighteen

10:15 – 10:45 am, Coffee Break

10:45 – 12:15 pm, **Session 6** (chair: *Aleksi Saarela*)

10:45 Enumeration and extensions of word-representable graphs (*Gaetz, Ji*)

11:15 Templates for the  $k$ -binomial complexity of the Tribonacci word (*Lejeune, Rigo, Rosenfeld*)

11:45 On substitutions closed under derivation: examples (*Košík, Starosta*)

12:15 – 2:00 pm, Lunch Break

2:00 – 3:00 pm, **Invited Talk 5** (chair: *Jeffrey Shallit*)

*Kristina Vučković* Structure of graph classes and algorithms

3:00 – 3:30 pm, Coffee Break

3:30 – 5:00 pm, **Session 7** (chair: *Antonio Restivo*)

3:30 Return words and bifix codes in eventually dendric sets (*Dolce, Perrin*)

4:00 On the commutative equivalence of bounded semi-linear codes (*Carpi, D'Alessandro*)

4:30 Derived sequences of Arnoux–Rauzy sequences (*Medková*)

## Friday, 13 September

9:15 – 10:15 am, **Invited Talk 6** (chair: *Alessandro De Luca*)

*Svetlana Puzynina* Abelian properties of words

10:15 – 10:45 am, Coffee Break

10:45 – 12:15 pm, **Session 8** (chair: *Julien Cassaigne*)

10:45 New results on pseudosquare avoidance (*Ng, Ochem, Shallit, Rampersad*)

11:15 Characteristic parameters and special trapezoidal words (*De Luca, D'Aniello*)

11:45 On discrete idempotent paths (*Santocanale*)

12:15 pm, Closing

All presentations will take place in Schofield Building, Room SCH.0.01 (Ground Floor)