

# Algebraic system, Logic, Language and Related Areas in Computer Science

## RIMS, 2021

February 17-19 , 2021  
The Kyoto University Research Institute for Mathematical Science  
Kyoto University

### Invited Speakers

#### Collin Bleak

School of Mathematics and Statistics, University of St Andrews,  
UK

*"On maximal subgroups of R. Thompson's group V"*

February 19 (Friday) 15:40 – 16:30 (Japan time)

Abstract: The subgroup structure of the R. Thompson groups  $F$ ,  $T$ , and  $V$  have come under serious scrutiny lately due to some groundbreaking results in  $C^*$ -algebras, arising initially from work of Haagerup and Olesen on the amenability of  $F$ . Their work opened a door, and peoples' interest immediately lead (by further transformative work of Kalantar and Kennedy, Adrienne Le Boudec, Nicolas Matte-Bon, and others) to a complete transformation of our understanding of  $C^*$ -simplicity. One key and surprising result here: Matte Bon and Le Boudec provide examples of finitely presented  $C^*$ -simple groups without free subgroups.

#### Christoher Briggs

Department of Mathematics, Embry-Riddle Aeronautical University,  
USA

*"A growth dichotomy for twisted polynomial algebras"*

February 18 (Thursday) 09:00 – 09:50 (Japan time)

Abstract: In this talk, we consider the growth of a twisted polynomial algebra. We prove that the algebra has polynomially bounded growth if the twisting endomorphism has all eigenvalues of magnitude 0 or 1, and the algebra has uniform exponential growth otherwise.

**Kokichi Futatsugi**

JAIST, Japan

*"Specification Verification in CafeOBJ"*

February 17 (Wednesday) 13:30 – 14:20

**Janet Page**

University of Michigan,

USA

*"The non-Gorenstein locus of certain rings arising from finite posets"*

February 17 (Wednesday) 09:00 – 09:50