

Winter School on Koszul Algebra and Koszul Duality

Dates	February 17–21, 2022 (Thursday–Monday)
Venue	Osaka City University (Sugimoto Campus) & Online (Zoom) February 17: Room E408 in the Science Building E & Zoom February 18–21: Room 810 in the General Education Building & Zoom 3-3-138, Sugimoto, Sumiyoshi, Osaka, 558-8585, Japan
Organizers	Aaron Chan (Nagoya University) Ryo Kanda (Osaka City University) Hiroyuki Minamoto (Osaka Prefecture University) Hyohe Miyachi (Osaka City University)

Program

February 17 (Thursday): Room E408 in the Science Building E

9:30–10:30	Free Discussion
10:50–11:50	Free Discussion
11:50–13:20	Registration
13:20–13:30	Venue Guidance
13:30–14:30	Takahiro Honma (Tokyo University of Science) Graded algebras, quadratic algebras, and Hilbert series
15:00–16:00	Takahiro Honma (Tokyo University of Science) Graded algebras, quadratic algebras, and Hilbert series
16:30–17:30	Satoshi Usui (Tokyo University of Science) Koszul complexes, Koszul algebras, and Hilbert series

February 18 (Friday): Room 810 in the General Education Building

10:40–10:50 Venue Guidance

10:50–11:50 Satoshi Usui (Tokyo University of Science)
Koszul complexes, Koszul algebras, and Hilbert series

Lunch Break

13:30–14:30 Satoshi Usui (Tokyo University of Science)
Koszul complexes, Koszul algebras, and Hilbert series

15:00–16:00 Kota Murakami (Kyoto University)
Koszulity for preprojective algebras and zigzag algebras

16:30–17:30 Kota Murakami (Kyoto University)
Koszulity for preprojective algebras and zigzag algebras

February 19 (Saturday): Room 810 in the General Education Building

9:30–10:30 Tsutomu Nakamura (University of Tokyo)
Koszul duality functors

10:50–11:50 Tsutomu Nakamura (University of Tokyo)
Koszul duality functors

Lunch Break

13:30–15:00 Ayako Itaba (Tokyo University of Science)
AS-regular algebras and Frobenius algebras

15:30–17:00 Hiroyuki Minamoto (Osaka Prefecture University)
BGG correspondence

February 20 (Sunday): Room 810 in the General Education Building

9:30–10:30 Noriyuki Abe (University of Tokyo)
Koszulity in BGG category \mathcal{O}

10:50–11:50 Noriyuki Abe (University of Tokyo)
Koszulity in BGG category \mathcal{O}

Lunch Break

13:30–14:30 Noriyuki Abe (University of Tokyo)
Koszulity in BGG category \mathcal{O}

15:00–16:00 Ryota Okazaki (Fukuoka University of Education)
Koszulity in combinatorial commutative algebra

16:30–17:30 Ryota Okazaki (Fukuoka University of Education)
Koszulity in combinatorial commutative algebra

February 21 (Monday): Room 810 in the General Education Building

9:30–10:30 Yuichiro Goto (Osaka University)
Koszulity in quasi-hereditary algebras

10:50–11:50 Yuichiro Goto (Osaka University)
Koszulity in quasi-hereditary algebras

Lunch Break

13:30–14:30 Shun Wakatsuki (Shinshu University)
Koszulity in topology

15:00–16:00 Shun Wakatsuki (Shinshu University)
Koszulity in topology

16:30–17:30 Free Discussion