Kimoi Kemboi

Contact Information	Department Cornell Univ Mallot Hall, Ithaca, New https://kim	of Mathematics ersity 310 Tower Road York 14853 USA hoitoek.github.io	sjk269@cornell.edu		
Education	Cornell University				
	 Ph.D. Candidate, Mathematics (expected completion: May 2023) Dissertation topic: Full exceptional collections on linear GIT quotients Advisor: Daniel Halpern-Leistner M.S. in Mathematics, December 2020 				
	University of Texas at Arlington				
	B.S. in Ma	athematics, summa cu	m laude, May 2017		
Honors and Awards	2020 2020–2022 2017–2018 2013–2017	Eleanor Norton Yor Summer Research F Graduate Fellowship Honors Distinction lington	k Award, Cornell University ellowship o, Cornell University Scholarship, University of Texas at Ar-		
Research Interests	Algebraic geometry: derived categories of coherent sheaves, geometric invariant theory, homological algebra, moduli theory				
Papers	Full strong exceptional collections of vector bundles on rank-two linear GIT quo- tients, with Daniel Halpern-Leistner, https://arxiv.org/abs/2202.12876				
	We produce a large class of linear GIT quotients by a reductive group of rank two that admit a "full strong exceptional collection" consisting of vector bundles.				
Teaching	 Cornell University: Instructor: Spring 2022 – Calculus I Spring 2020 – Calculus I Teaching Assistant: Fall 2021 – Graduate Algebra Fall 2020, Spring 2021, Fall 2022 – Advanced Linear Algebra Fall 2019 – Engineering Calculus Fall 2018, Spring 2019 – Introductory Linear Algebra 				

Conference Lectures	Full exceptional collections on rank-two linear GIT quotients, Derived categories and moduli spaces FRG workshop, Cornell University (April 2022).
	Full strong exceptional collections on rank two linear GIT quotients, Route 81 conference, zoom edition (November 2021).
Seminar Talks	Full strong exceptional collections on rank-two linear GIT quotients, Algebraic geometry seminar, University of Utah (Upcoming, December 2022)
	Full strong exceptional collections on rank-two linear GIT quotients, Algebraic geometry seminar, Brown University (October 2022)
	Full strong exceptional collections on rank-two linear GIT quotients, Algebraic geometry seminar, Columbia University (October 2022)
	Lectures on Grothendieck duality, Algebraic geometry student seminar, Cornell University (March 2022).
	Homological projective duality, Algebraic geometry student seminar, Cornell University (July 2021).
	The Artin-Lurie representability theorem, Berstein seminar on derived algebraic geometry, Cornell University (April 2021).
	Stable infinity categories, Berstein seminar on derived algebraic geometry, Cornell University (February 2021).
	Full strong exceptional collections on linear GIT quotients, Algebraic geometry student seminar, Cornell University (October 2020).
Service	 Served as a teaching assistant for the Michigan Research Experience for Graduates summer program at the University of Michigan (Summer 2022). Served as a mentor for undergraduate students at Cornell participating in the directed reading program (Fall 2021 – Present). Co-organized student seminars at Cornell University: Olivetti graduate student seminar (Spring 2021), Algebraic geometry student seminar (Fall 2020). Served as a representative of the Cornell mathematics department in outreach efforts organized at the annual Field of Dreams conference, which aims to support students who are underrepresented or underserved in mathematics to pursue graduate degrees in mathematical sciences (Fall 2020, Fall 2021). Served as a volunteer for the annual Expanding Your Horizons conference at Cornell University, a science conference for girls between 7th and 9th grade, where I helped design and facilitate engaging mathematical concepts for the participants (Spring 2018, Spring 2019). Served as a teaching assistant at the Awesome Math summer camp (Summer 2018).

Workshops Attended	Aug. 2022	AGNES summer school, Brown University,
		"Moduli of higher-dimensional varieties".
	July. 2022	Derived FRG workshop, University of Michigan, Ann Arbor
		"Derived Categories, Moduli Spaces, and Hyperkähler Vari-
	Sept. 2021	eties". Lukecin autumn school in algebraic geometry, zoom edition,
		"K3 categories and hyperkahler moduli spaces".
	June 2018	Fields institute summer school, McMaster University,
		"Algebraic group actions".
	May 2016	Women and Mathematics, Institute for Advanced Study,
		"Curves, loops, and words in geometry".