KO WOON OHM

Department of Mathematics UC San Diego 9500 Gilman Drive La Jolla, CA 92093 Office: (858) 534-3590 Fax: (858) 534-5273 Email: kwohm@ucsd.edu

Homepage: http://www.math.ucsd.edu/kwohm

Career

- Assistant Teaching Professor, The University of California, San Diego, 2022 present.
- Unit 18 Lecturer, The University of California, San Diego, 2016 2022.
- Lecturer, The University of Texas at Austin, 2011 2016.
- Postdoctoral Position, ETH, Zurich, 2014.
- Postdoctoral Fellowship, MSRI, Berkeley, CA, 2011.

EDUCATION

- Ph.D., The University of Iowa, Iowa City, IA, 2010.
- M.Sc., Ewha Womans University, Seoul, South Korea, 2003.
- B.Sc., Ewha Womans University, Seoul, South Korea, 2001.

PEDAGOGICAL ACTIVITIES

- Redesigning Math 2, Summer Bridge Pilot Program, UC San Diego, Summer 2023.
- Redesigning Precalculus Courses at UC San Diego, Summer 2024.
- Scaffolding Math Students using AI, Summer 2024.

RESEARCH PAPERS

- K. Ohm and Zuo Lin, Projection Theorems in the Presence of Expansions, Preprint, arXiv:2408.11159
- K. Ohm, Projection Theorems and Isometries of Hyperbolic Spaces, Preprint, arXiv:2305.12302
- K. Um, Elliptic equations with singular BMO coefficients in Reinfenberg domains, Journal of Differential Equations, 253(11):2993–3015, 2012.

Grants and Awards

- AI FAST Challenge Grant, Acquiring Math Prerequisites Efficiently and Scalably with AI project, 2025
- Graduate Summer Fellowship Award, University of Iowa, 2006, 2007, 2008.
- BK 21 Fellowship Award, Korean Government 2002.

2

Talks

- Covering Lemmas in Analysis and Geometry, Johns Hopkins University, MD, 2025
- Regularity for Elliptic Equations with Discontinuous Coefficients, UC Berkeley, CA, 2011
- Regularity for Elliptic Equations with Discontinuous BMO Coefficients in Reinfenberg Flat Domains, MSRI, CA, 2011
- Elliptic Equations with BMO Coefficients with singularity in Rienfenberg Flat Domains, Joint Mathematics Meeting, Washington D.C., 2009
- W^{1,p} Regularity of Elliptic Equations in Reinfenberg Flat Domains, Project NexT/Young Mathematicians Network Poster Session, Joint Mathematics Meeting, Washington D.C., 2009
- As an Experienced Teaching Assistant from other culture, Teaching center, University of Iowa, IA, 2007

Teaching

- Calculus for Science and Engineering II, (Summer 2024), The University of California, San Diego.
- Calculus and Analytic Geometry for Science and Engineering, (Spring 2024), The University of California, San Diego.
- Calculus and Analytic Geometry for Science and Engineering, Lead Instructor, Super lecture, (Winter 2024), The University of California, San Diego.
- Introduction to Differential Equations, (Fall 2023), The University of California, San Diego.
- Calculus for Science and Engineering II, (Summer 2023), The University of California, San Diego.
- Vector Calculus, (Spring 2023), The University of California, San Diego.
- Calculus and Analytic Geometry for Science and Engineering, (Spring 2023), The University of California, San Diego.
- Introduction to College Mathematics, (Winter 2023), The University of California, San Diego.
- Calculus and Analytic Geometry for Science and Engineering, *Lead Instructor*, *Super lecture*, (Fall 2022), The University of California, San Diego.
- Calculus for Science and Engineering II, (Summer 2022), The University of California, San Diego.
- Introduction to Differential Equations, (Spring 2022), The University of California, San Diego.
- Vector Calculus, (Spring 2022), The University of California, San Diego.
- Calculus and Analytic Geometry for Science and Engineering, (Winter 2022), The University of California, San Diego.
- Introduction to Differential Equations, (Winter 2022), The University of California, San Diego.
- Precalculus, (Fall 2021), The University of California, San Diego.
- Calculus for Science and Engineering II, (Summer 2021), The University of California, San Diego.
- Vector Calculus, (Spring 2021), The University of California, San Diego.
- Calculus for Science and Engineering II, (Spring 2021), The University of California, San Diego.

KO WOON OHM 3

- Precalculus, (Winter 2021), The University of California, San Diego.
- Calculus III, (Fall 2020), The University of California, San Diego.
- Introduction to Differential Equations, (Fall 2020), The University of California, San Diego.
- Introduction to Differential Equations, (Summer 2020), The University of California, San Diego.
- Calculus for Science and Engineering II, (Summer 2020), The University of California, San Diego.
- Calculus and Analytic Geometry for Science and Engineering, (Spring 2020), The University of California, San Diego.
- Vector Calculus, (Spring 2020), The University of California, San Diego.
- Calculus and Analytic Geometry for Science and Engineering, (Winter 2020), The University of California, San Diego.
- Introduction to Differential Equations, (Spring 2020), The University of California, San Diego.
- Calculus and Analytic Geometry for Science and Engineering, (Summer 2019), The University of California, San Diego.
- Introduction to College Mathematics, (Summer 2019), The University of California, San Diego.
- Introduction to Differential Equations, (Spring 2019), The University of California, San Diego.
- Calculus III, (Spring 2019), The University of California, San Diego.
- Calculus and Analytic Geometry for Science and Engineering, (Winter 2019), The University of California, San Diego.
- Calculus II, (Winter 2019), The University of California, San Diego.
- Calculus III, (Fall 2018), The University of California, San Diego.
- Introduction to College Mathematics, (Fall 2018), The University of California, San Diego.
- Calculus for Science and Engineering II, (Summer 2018), The University of California, San Diego.
- Vector Calculus, (Spring 2018), The University of California, San Diego.
- Linear Algebra, (Spring 2018), The University of California, San Diego.
- Calculus I, (Winter 2018), The University of California, San Diego.
- Precalculus, (Winter 2018), The University of California, San Diego.
- Calculus and Analytic Geometry for Science and Engineering, (Fall 2017), The University of California, San Diego.
- Introduction to College Mathematics, (Fall 2017), The University of California, San Diego.
- Calculus and Analytic Geometry for Science and Engineering, (Summer II 2017), The University of California, San Diego.
- Calculus for Science and Engineering II, (Summer I 2017), The University of California, San Diego.
- Calculus I, (Spring 2017), The University of California, San Diego.
- Calculus for Science and Engineering II, (Spring 2017), The University of California, San Diego.
- Calculus for Science and Engineering I, (Winter 2017), The University of California, San Diego.
- Introduction to Discrete Mathematics, (Winter 2017), The University of California, San Diego.

4 KO WOON OHM

- Calculus for Science and Engineering II, (Fall 2016), The University of California, San Diego.
- Calculus for Science and Engineering I, (Fall 2016), The University of California, San Diego.
- Calculus II (Spring 2015), Instructor, The University of Texas at Austin.
- Integral Calculus (Fall 2014), Instructor, The University of Texas at Austin.
- M.Sc. Seminar on Regularity Theory of PDEs (Spring 2014), ETH, Zurich, Switzerland.
- Integral Calculus (Fall 2013), Instructor, The University of Texas at Austin.
- Linear Algebra and Applications (Summer 2013), The University of Texas at Austin.
- Integral Calculus (Spring 2013), The University of Texas at Austin.
- Integral Calculus (Fall 2012), The University of Texas at Austin.
- Advanced Calculus for Applications I (Spring 2012), The University of Texas at Austin.
- Differential Calculus (Spring 2012), The University of Texas at Austin.
- Advanced Calculus for Applications I (Fall 2011), The University of Texas at Austin.