

Doç Dr. Yuki Kaneko

Sabancı University, FENS, Orhanlı-Tuzla, İstanbul 34956, Turkey

+90 (539) 255-8187 ✉ yuki@sabanciuniv.edu 🌐 <http://myweb.sabanciuniv.edu/yuki/>

 ORCID: <https://orcid.org/0000-0002-1861-5703>

RESEARCH INTERESTS

Gamma-Ray Bursts, Soft Gamma Repeaters, Anomalous X-ray Pulsars
Gamma-Ray/X-Ray Spectroscopy, High-Energy Detector Development
STEM Education (College level), Active Learning, Collaborative Learning

ACADEMIC TITLES

YÖK Associate professor (Doçent)	2017
Ph.D. Physics, University of Alabama in Huntsville Dissertation: "Spectral Studies of Gamma-Ray Burst Prompt Emission" Advisor: Dr. Robert D. Preece	2005
M.S. Physics, University of Alabama in Huntsville	2002
B.S. with Summa Cum Laude (The Highest Honor) Physics and Astronomy, Youngstown State University, Youngstown, Ohio, U.S.A.	2000

TEACHING POSITIONS

Instructor (Physics) , Faculty of Engineering and Natural Sciences, Sabancı University, Istanbul, Turkey	2025 – Present
Instructor/Coordinator (Integrated Science, Physics, Astronomy) , Foundations Development Directorate, Sabancı University, Istanbul, Turkey	2009 – 2025
IB Physics Instructor , TEV İnanç Türkeş High School for Gifted Students, Gebze, Kocaeli, Turkey	2006 – 2008
Graduate Teaching Assistant (Physics and Astronomy) , University of Alabama in Huntsville, Huntsville, Alabama, U.S.A.	2000 – 2001

RESEARCH POSITIONS

Postdoctoral Research Associate , Sabancı University, Istanbul, Turkey	2009 – 2011
Postdoctoral Research Associate , Universities Space Research Association, National Space Science and Technology Center, Huntsville, Alabama, U.S.A.	2005 – 2008
Graduate Research Assistant , University of Alabama in Huntsville / National Space Science and Technology Center, Huntsville, Alabama, U.S.A.	2001 – 2005
Undergraduate Student Visitor , High Altitude Observatory, Boulder, Colorado, U.S.A.	1999
Undergraduate Research Assistant , Youngstown State University, Center for Photon Induced Processes, Youngstown, Ohio, U.S.A.	1998 – 2000

OTHER RELEVANT POSITIONS

Education Consultant (for designing comprehensive strategic plan of Turkish-Japanese Science and Technology University) , Arama Consulting, Istanbul, Turkey	2021 – 2022
---	-------------

CERTIFICATES, SUMMER SCHOOLS, WORKSHOPS, PROGRAMS ORGANIZED

Organizer/Moderator, FENS (New) Faculty Teaching Workshop , Sabancı University, https://sites.google.com/sabanciuniv.edu/fens-teaching-workshop-2025/	2025
Organizer/Lecturer, Workshop on Spectral Analysis in Hard X-ray & Gamma-Ray Astrophysics , Online, https://sites.google.com/sabanciuniv.edu/spectral-workshop/home	2023
Guest Lecturer, Matter of Life: Earth Outbound (HSCI-320) , ArtCenter College of Design, California, U.S.A.	2021-2022
Organizer/Lead Moderator, Workshop on Innovative Approaches in College STEM Education , Sabancı University https://scienceofnature.sabanciuniv.edu/stem-workshop/	2018 – Present
Organizer/Presenter, Annual Sabancı University Internal Education Conference , Sabancı University http://teachingconf.sabanciuniv.edu	2018 – Present
Organizer/Presenter, Teaching Seminars Program for Graduate Students , Sabancı University, https://preparing-faculty-turkey.org , https://sites.google.com/sabanciuniv.edu/teaching-seminars/	2019 – Present
Certified, Flipped Learning 3.0 Higher Ed Certification Level-1 , Flipped Learning Global Initiative	2020
Attendee, Writing and Thinking STEM Workshop , Bard College, New York, U.S.A	2017
Organizer/Trainer, Teaching Scholars Residency Program , Sabancı University, Istanbul	2013 – Present
Coordinator/Trainer, NS Learning Assistant Program , Sabancı University, Istanbul	2014 – Present
Organizer/Lecturer, Active Learning Workshop for FENS Graduate Students (a part of the pre-semester orientation program), Sabancı University, Istanbul	2014 – Present
Organizer/Instructor, Preparing Future FENS Faculty , Teaching Workshop Series for Graduate Students, Sabancı University, Istanbul	2012 – 2014
Organizer/Instructor, FENS TA Orientations , Sabancı University, Istanbul	2011 – 2013
Lecturer, English for Math and Science , School of Languages, Sabancı University, Istanbul	2010 – 2020
Lecturer, Fermi Gamma-ray Space Telescope Data Analysis Workshop , Sabancı University, Istanbul	2010

FUNDED PROJECTS

Researcher , TÜBİTAK (No. 125F178) “Investigation and Characterization of Temporal Variabilities and Periodic Oscillations in Gamma-Ray Bursts”	2025 – 2028
Principal Investigator , TÜBİTAK (No. 118F344) “Deep Search for and Investigation of Untriggered Gamma-Ray Transient Events Using Fermi/GBM Data”	2019 – 2022
Co-Investigator , US Embassy of Ankara “Adaptation of ‘Preparing Future Faculty’ Program for the Turkish University Context”	2018 – 2022
Researcher , TÜBİTAK (No. 119F335) “Detailed Studies of Gamma-Ray Bursts with Extended Emissions”	2020 – 2022
Researcher , TÜBİTAK (No. 121F266) “High Time Resolution Investigations of Magnetar Bursts”	2021 – 2024

Researcher , TÜBİTAK (No. 115F463) “Long-term X-ray Emission Properties of Magnetars”	2016 – 2018
Principal Investigator , TÜBİTAK (No. 113R031) “Spectral and Temporal Characterization of Magnetar Bursts”	2013 – 2015
Researcher , TÜBİTAK (No. 109T755) “Broadband Spectral Studies of Gamma-Ray Bursts”	2010 – 2013

(CO-)ADVISED STUDENTS

Current:

Mustafa Demirer, pursuing Ph.D at Sabancı University

Graduated:

Özge Keskin, received **Ph.D. in 2025** (currently a researcher student at Sabancı University)
Thesis Title: “Spectrotemporal Studies of Magnetar Bursts and Their Origin Through Crustal Yielding”

Mete Uzuner, received **M.S. in 2022** (currently a Ph.D student at Cardiff University)
Thesis Title: “Identification and Investigations of Untriggered Magnetar Bursts in the Fermi Gamma-Ray Burst Monitor Database”

Özge Keskin, received **M.S. in 2021** (currently a researcher student at Sabancı University)
Thesis Title: “Identification and Investigations of Untriggered Magnetar Bursts in the Fermi Gamma-Ray Burst Monitor Database”

Demet Kırmızıbayrak, received **M.S. in 2017** (currently a Ph.D student at the University of British Columbia)
Thesis Title: “Broadband Spectral Investigations of Magnetar Bursts”

Aslıhan Muazzez Ünsal, received **Ph.D. in 2015**
Thesis Title: “Spectral Analysis of Gamma-Ray Bursts with Thermal Signature During Their Prompt Phase”

COURSES TAUGHT & PROJECTS OFFERED

PHYS 113 “Basic Concepts of Physics for Scientists and Engineers”	2025 – Present
NS 101/102 “Science of Nature I & II” [Freshman]	2013 – Present
NS 501/502 “Basic Concepts & Teaching of Science” [Graduate]	2009 – 2013
NS 209 “Beyond the Milky Way” [Undergraduate]	2023 – Present
PROJ 102/201 “Undergraduate Project Course” [Undergraduate]	2010 – Present
Program for Undergraduate Research Experience (PURE) [Undergraduate]	2020 – 2022, 2025

PROFESSIONAL MEMBERSHIP, SERVICES

Leader , Promoting Excellence in Education and Resource Sharing (PEERS) Initiative, Foundations Development Directorate, Sabancı University fdd.sabanciuniv.edu/peers/	2023 – Present
Co-Vice Chair/Member , SEFI Physics Special Interest Group	2018 – Present
Member , Professional and Organizational Development (POD) Network in Higher Education	2024 – Present
Scientific Committee, ITU Co-Learning Lab , Istanbul Technical University, Center for Excellence in Education	2023 – Present

Peer Reviewer , The Astrophysical Journal, Astronomy & Astrophysics, Publications of the Astronomical Society of Japan, Monthly Notices of Royal Astronomical Society	2006 – Present
Member , FENS Education & Accreditation Committee, Sabanci University	2018 – Present
Member , Transfer Committee, Sabanci University	2016 – 2017

HONORS & AWARDS

Award of Recognition , Foundations Development Directorate, Sabanci University	2021
First Year University Courses Teaching Award , Selected 2 nd by students, Sabanci University	2020, 2021, 2022, 2025
First Year University Courses Teaching Award , Selected 4 th by students, Sabanci University	2015, 2018

COMPUTING SKILLS

Operating systems: Linux, Windows, Mac OS X
 Programming: IDL, C, C++, HTML, Python

LANGUAGES

Japanese (Native), English (Fluent), Turkish (Fluent in Spoken, Moderate in Written)

SELECTED ORAL PRESENTATIONS (2013 and later)

“Empowering Learners & Designing for Impact: Contemporary Approaches to College STEM Education”, Invited Keynote Speaker , <i>ITU Co-Learning Lab 2025</i> , Istanbul Technical University	2025
“Learner-Centered, Interdisciplinary Approach to Freshman Science Course”, Invited talk , <i>International Congress on Education Quality</i> , University of Silesia, Katowice, Poland	2022
“Learner-Centered, Interdisciplinary Approach to Freshman Science Course”, Online invited talk , TED University, Ankara	2022
“Short Gamma-Ray Bursts: An Overview”, Online invited talk , “ <i>The Latest Shows from Neutron Stars</i> ”, Ege University Observatory Workshop Series	2021
“University Education after Pandemic: Natural Sciences and Math”, Invited panellist , <i>Conference on Online University Education during Pandemic</i> , TED University, Ankara	2021
“Student-Centered Approach in Undergraduate Education”, Invited talk , Istanbul Technical University, Center for Excellence in Education	2019
“Learner-Centered, Interdisciplinary Approach to Freshman Science Course”, <i>International Conference on Physics Education</i> , Johannesburg, South Africa	2018
“Active Learning in University: An Approach to a Freshman Science Course”, <i>SEFI Annual Conference</i> , Technical University of Denmark, Copenhagen, Denmark	2018
“Teaching Scholars Residency Program at Sabanci University: Training Facilitators of Active Learning” <i>Innovative Teaching and Technology in Higher Education</i> , Kadir Has University, Istanbul, Turkey	2016
“Teaching Scholars Residency Program at Sabanci University: Training Facilitators of Active Learning” <i>International Congress on New Trends in Education</i> , Antalya, Turkey	2016

- “Expanding Vision and Change Initiative Beyond US: Training Young Educators in Turkey” 2014
Annual American Society of Microbiology Conference for Undergraduate Educators, Massachusetts, U.S.A.
- “Short Gamma-Ray Bursts with Extended Emission Observed with BAT and GBM” 2013
Explosive Transients: Lighthouses of the Universe, Santorini, Greece
- “Spectral and Temporal Properties of Pre-Fermi GRBs” (Invited) 2013
American Astronomical Society High-Energy Astrophysics Division Meeting, Monterey, California, U.S.A.