

## Doç Dr. Yuki Kaneko

Sabancı University, Foundations Development Directorate, Orhanlı-Tuzla, İstanbul 34956, Turkey

✉ [yuki@sabanciuniv.edu](mailto:yuki@sabanciuniv.edu)

🌐 <http://myweb.sabanciuniv.edu/yuki/>

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

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### 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

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### ACADEMIC TITLES

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

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### TEACHING POSITIONS

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|---|----------------|
| <b>Instructor/Coordinator</b> (Integrated Science, Physics, Astronomy), Foundations Development Directorate, Sabancı University, İstanbul, Turkey | 2009 – Present |
| <b>IB Physics Instructor</b> , TEV İnanç Türkeş High School for Gifted Students, Gebze, Kocaeli, Turkey   | 2006 – 2008    |
| <b>Graduate Teaching Assistant</b> (Physics and Astronomy), University of Alabama in Huntsville, Huntsville, Alabama, U.S.A.                      | 2000 – 2001    |

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### RESEARCH POSITIONS

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

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### OTHER RELEVANT POSITIONS

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| <b>Education Consultant</b> (for designing comprehensive strategic plan of Turkish-Japanese Science and Technology University), Arama Consulting, İstanbul, Turkey | 2021 – 2022 |
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## CERTIFICATES, SUMMER SCHOOLS, WORKSHOPS, PROGRAMS

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

## FUNDED PROJECTS

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| <b>Principal Investigator</b> , TÜBİTAK (No. 118F344) “Deep Search for and Investigation of Untriggered Gamma-Ray Transient Events Using Fermi/GBM Data” | 2019 – 2022 |
| <b>Co-Investigator</b> , US Embassy of Ankara “Adaptation of ‘Preparing Future Faculty’ Program for the Turkish University Context”                      | 2018 – 2022 |
| <b>Researcher</b> , TÜBİTAK (No. 119F335) “Detailed Studies of Gamma-Ray Bursts with Extended Emissions”   | 2020 – 2022 |
| <b>Researcher</b> , TÜBİTAK (No. 121F266) “High Time Resolution Investigations of Magnetar Bursts”   | 2021 – 2024 |
| <b>Researcher</b> , TÜBİTAK (No. 115F463) “Long-term X-ray Emission Properties of Magnetars”   | 2016 – 2018 |
| <b>Principal Investigator</b> , TÜBİTAK (No. 113R031) “Spectral and Temporal Characterization of Magnetar Bursts”  | 2013 – 2015 |
| <b>Researcher</b> , TÜBİTAK (No. 109T755) “Broadband Spectral Studies of Gamma-Ray Bursts”   | 2010 – 2013 |

## (CO-)ADVISED STUDENTS

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### Current:

Özge Keskin, pursuing Ph.D at Sabancı University

Mustafa Demirer, pursuing M.S. at Sabancı University

### Graduated:

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 Ph.D 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

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|   |                |
|---|----------------|
| <b>NS 101/102</b> "Science of Nature I & II" [Freshman]                     | 2013 – Present |
| <b>NS 501/502</b> "Basic Concepts & Teaching of Science" [Graduate]         | 2009 – 2013    |
| <b>NS 209</b> "Beyond the Milky Way" [Undergraduate]                        | 2023 – Present |
| <b>PROJ 102/201</b> "Undergraduate Project Course" [Undergraduate]          | 2010 – Present |
| <b>Program for Undergraduate Research Experience (PURE)</b> [Undergraduate] | 2020 – 2022    |

## PROFESSIONAL MEMBERSHIP, SERVICES

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|---|----------------|
| <b>Leader</b> , Promoting Excellence in Education and Resource Sharing (PEERS) Initiative, Foundations Development Directorate, Sabancı University <a href="http://fdd.sabanciuniv.edu/peers/">fdd.sabanciuniv.edu/peers/</a> | 2023 – Present |
| <b>Co-Vice Chair/Member</b> , SEFI Physics Working Group  | 2018 – Present |
| <b>Peer Reviewer</b> , The Astrophysical Journal, Astronomy & Astrophysics, Publications of the Astronomical Society of Japan   | 2006 – Present |
| <b>Member</b> , FENS Education & Accreditation Committee, Sabancı University  | 2018 – Present |
| <b>Member</b> , Transfer Committee, Sabancı University  | 2016 – 2017    |

## HONORS & AWARDS

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| <b>Award of Recognition</b> , Foundations Development Directorate, Sabancı University                          | 2021             |
| <b>First Year University Courses Teaching Award</b> , Selected 2 <sup>nd</sup> by students, Sabancı University | 2020, 2021, 2022 |
| <b>First Year University Courses Teaching Award</b> , Selected 4 <sup>th</sup> by students, Sabancı University | 2015, 2018       |

## COMPUTING SKILLS

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

## LANGUAGES

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

## SELECTED ORAL PRESENTATIONS (2013 and later)

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| "Learner-Centered, Interdisciplinary Approach to Freshman Science Course", <b>Invited talk</b> ,<br><i>International Congress on Education Quality</i> , University of Silesia, Katowice, Poland             | 2022 |
| "Learner-Centered, Interdisciplinary Approach to Freshman Science Course", Online <b>invited talk</b> , TED University, Ankara   | 2022 |
| "Short Gamma-Ray Bursts: An Overview", Online <b>invited talk</b> , " <i>The Latest Shows from Neutron Stars</i> ", Ege University Observatory Workshop Series   | 2021 |
| "University Education after Pandemic: Natural Sciences and Math", <b>Invited panellist</b> ,<br><i>Conference on Online University Education during Pandemic</i> , TED University, Ankara                    | 2021 |
| "Student-Centered Approach in Undergraduate Education", <b>Invited talk</b> , 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 Sabancı 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 Sabancı 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" <i>Annual American Society of Microbiology Conference for Undergraduate Educators</i> , Massachusetts, U.S.A.         | 2014 |
| "Short Gamma-Ray Bursts with Extended Emission Observed with BAT and GBM" <i>Explosive Transients: Lighthouses of the Universe</i> , Santorini, Greece   | 2013 |
| "Spectral and Temporal Properties of Pre-Fermi GRBs" (Invited)<br><i>American Astronomical Society High-Energy Astrophysics Division Meeting</i> , Monterey, California, U.S.A.                              | 2013 |