

Alessandro Bemporad (alessandro.bemporad@inaf.it)

TEACHING EXPERIENCE (University level)

- **Temporary Lecturer (2012-present)** at the Physics Dep. - University of Turin (ind.: FIS/05 Astronomia e Astrofisica) for the Course “*Elementi di Elio fisica e Meteorologia spaziale*” (48 hours, 6 Credits);
- **Assistant (2021-2019)** at the Physics Dep. - University of Turin (ind.: FIS/05 Astronomia e Astrofisica) for the Course “*Astrophysics Laboratory*” (4 hours, course held by Prof. S. Fineschi);
- **Co-supervisor** (with Prof. F. Reale, University of Palermo) of a Ph.D. student in Physics (Dott. R. Biondo) for a Research Project titled “*MHD numerical simulation of coronal plasma heating and acceleration in support for the analysis of future Metis observations*” (10/2019-09/2022);
- **Co-supervisor** (with Prof. S. Fineschi) of a 2 years post-doc (Dr. F. Frassati) for the Project titled “*Analisi di osservazioni acquisite dallo spazio e da Terra per lo sviluppo di diagnostiche dei parametri fisici dei plasmi della corona solare applicabili dalla futura missione Metis/Solar Orbiter*” (08/2019 – 07/2021);
- **Co-supervisor** (with Prof. L. Feng, Purple Mountain Observatory, Nanjing) of a Ph.D. student in Physics (Dott. B. Ying) for a Research Project titled “*Multi-wavelength and Multi-perspective Studies of Coronal Mass Ejections and their driven Shocks*” (07/2018-06/2020);
- **Supervisor** of a Degree Thesis in Physics in 2020 (Dott. F. Carella) “*Automated identification of Active Regions and Coronal Hole in EUV solar images*”;
- **Supervisor** of a Ph.D. student in Physics (Dott. F. Frassati) for a Research Project titled “*Interplanetary shocks driven by Coronal Mass Ejections: a study based on data acquired by space-based instrumentations*” (10/2015-09/2018);
- **Mentor** of an under-graduate Erasmus student (D. Andriuta) in 2018 and 2019 (from June to September) for a project titled “*Search of possible correlations between the strength of geomagnetic storms and interplanetary magnetic field measurements*”;
- **Supervisor** of a Degree Thesis in Physics in 2015 (Dott. G. Guilluy) titled “*Optimization of the software for the detection of CMEs for METIS instrument on-board ESA-Solar Orbiter*”;
- **Co-Supervisor** of a Master Thesis in Physics in 2014 (Dott. J. Girella) titled “*Magnetic Fields in the Solar Corona:Diagnostics from polarimetric observations of Total Eclipse*”;
- **Supervisor** of a 2 years post-doc (Dr. R. Susino) within the European Project SWIFF “*Space Weather Integrated Forecasting Framework*” (10/2011-11/2013);
- **Supervisor** of a Master Thesis in Physics in 2013 (Dott. M. Morra) titled “*Studio Spettroscopico dei Moti non termici del Plasma Coronale*”;
- **Supervisor** of a Master (Erasmus) Thesis in Physics in 2013 (Dott. A. Parashiv) titled “*Characterization of Polar Jets in the Solar Corona with HINODE/XRT and SOHO data*”;
- **Supervisor** of a Degree Thesis in Physics in 2009 (Dott. M. Calabrese) titled “*Determinazione di Parametri Fisici del Plasma Solare in un Buco Coronale da analisi di Dati Spettroscopici HINODE/EIS*”;

TEACHING EXPERIENCE (other levels)

- **Tutor** for "alternanza scuola-lavoro" of high-school project (A.S. 2018-2019) "Measurement of Earth-Moon distance";
- **Supervisor** of a high school dissertation (A.S. 2016-2017) titled "The sun and sunspots: measurement of solar rotation rate";
- **Supervisor** of a high school dissertation (A.S. 2017-2018) titled "Measurement of the Hubble constant".
- **Lecturer** for the 2nd Level University Master "Mathematical and Physical methods for Space Sciences (MPM Space Sciences)", organized by the University of Turin, Mathematics Department (6 hours, A.A. 2019-2020);

- **Lecturer** for the course “*A cavallo di un raggio di luce: corso di astronomia*”, organized by UniTre Torino Metropolis (2 hours, February 29, 2016);
- **Lecturer** for the “*Corso di formazione di Astronomia e Astrofisica per docenti di scuola secondaria*”, Turin, December 11, 2019.
- **Lecturer** for the course “*Dal Sole alle Aurore: effetti imprevedibili della nostra stella*” organized for the “Campus MFS di Astronomia e Astrofisica” (6 hours, 6-8 November 2020).