

The Scientific Publication

Enrico Rubiola

<http://rubiola.org>

Lecture series for PhD Students, Postdoc Fellows, and Young Scientists

Guests are welcome

Purposes and General Information

While the popular dictum “publish or perish” should not be taken literally, a wise publication strategy is vital for a researcher. This course aims at teaching how to communicate scientific ideas in journals, but also conferences and books. Whether the participant is interested in engineering, physics, mathematics, medicine, biology, chemistry, psychology or archeology, the general problems underneath the scientific publication are surprisingly similar.

The student familiarizes with the choice of a journal, the organization of a text, the mechanism of the peer-review process and the reasons why articles are published or rejected, the impact factor, and other relevant topics of the scientific communication. Emphasis is given to all the technical aspects the researcher comes across when he/she tries to publish an article.

As ruled by the PhD Schools in Bourgogne and Franche Comté, this course falls in the category of “humanities,” as opposed to “science” or “toolbox.”

Audience

This course is a *must* for PhD students and for Postdoc fellows of *all disciplines* (engineering, physics, mathematics, chemistry, medicine, biology, psychology....

Young colleagues and Master students (chiefly CMI) are welcome, as well as all guests from high schools (lycées), Government Agencies (administration publique), Private Companies, etc.

Prerequisites

The course is intended for a broad audience. Thus, there are no specific prerequisites. However, it is understood that the attendee has the motivation and a genuine interest for the scientific, and that (s)he has a suitable background.

Language

Lectures are given in English and attendees are expected to work in English. However, Italian and French can be used in private discussions with the Instructor.

Burden and Schedule

10 hour lectures in 5 sessions, once per week.

Further details are on the Enrico’s home page <http://rubiola.org>

On the left-hand grey area, go to --> Syllabus --> PhD Lectures (also --> News)

Academic year 2016-2017		
Date	Time	Room
Monday, March 6, 2017	10:00-12:00	(tbd)
Monday, March 13, 2017	10:00-12:00	(tbd)
Monday, March 20, 2017	10:00-12:00	(tbd)
Monday, March 27, 2017	10:00-12:00	(tbd)
Monday, April 3, 2017	10:00-12:00	(tbd)

Learning Material

The full slideshow is available on the Enrico's home page <http://rubiola.org>

The students can learn a lot from

- Staff of the University of Chicago Press, *The Chicago Manual of Style*, 16th edition, University of Chicago Press 2010, ISBN 978-0-226-10420-1.
- R. A. Day, B. Gastel, *How to Write & Publish a Scientific Paper*, 7th edition, Cambridge 2012, ISBN 978-1-107-67074-7.
- B. Gustavii, *How to Write and Illustrate a Scientific Paper*, 2nd edition, Cambridge 2008, ISBN 978-0-511-39463-8.
- L. Lamport L, *Latex*, 2nd edition, Addison Wesley 1994, ISBN 978-0-201-52983-8

Contents

The peer-review journal. The scientific protocol and the peer-review process. Impact factor, journal "rank," citations, etc. The weird case of arXiv, Hal and other repositories. How the full process works, from submission to online/paper print

How to write a scientific article. Choice of the journal/conference, topic matching, and self-evaluation. Organization of an article. Manage weak points. Ethics, plagiarism, self-plagiarism, and other plagues. Citations and references. General rules.

PhD thesis, reports, and books. General organization. Specific issues: front/back matter, index. Figures, proofreading, and other (boring) relevant stuff. How to submit a project.

The problem of copyright.

Write financial proposals.

Very short introduction to the computer programs. Writing: Latex, Word, OpenOffice, etc. Bibliography: Bibtex, Endnote, Zotero. Drawing and sketching. Giving a talk.

Academic careers. Getting in the academic career in France and in a few other Countries. Positions and rank. The selection and hiring process. Etc.

The Instructor

Enrico Rubiola is an internationally recognized scientist in the field of oscillators, frequency stability, AM-PM noise, and precision instruments. Born in Italy in 1957, he came in France in 2000 as a full professor at the university Henri Poincaré, and he lived in the USA in the meanwhile. He lectured in several institutions in Italy, France, Germany and USA, and he collaborates with high rank institutions like NASA and Max Planck Institute.

Prof. Rubiola has authored or co-authored more than 200 articles in journals, conferences and edited books. He published three books, one of which translated in Chinese. One more book is in progress. He serves as a reviewer for a dozen of journals of electrical engineering, physics and optics, and has served as an associate editor for a IEEE journal. A wealth of articles, slides, and open literature is available on the home page <http://rubiola.org>.