

IN2P3 School of Statistics 2022

Yann Coadou
for the SOS organising committee

CPPM Marseille

Carry-le-Rouet
20 May 2022





SOS
School of Statistics

IN2P3 School of Statistics 2022

May 16-20 Carry-le-Rouet

Scientific Programme
Course
 Basic concepts of statistics: Roman Mader (CPM, Clermont-Ferrand)
 Classical interval estimation, tests, asymptotics and beyond: Nicolas Berger (LAPF, Arceville)
 Introduction to machine learning: Vincent Bava (LJKS, Clermont-Ferrand)
 Performance metrics: Biased decision trees: Yann Cozou (EPHE, Marseille)
 Introduction to deep learning: Veronica Sanz (Universidad de Valencia, University of Sussex)
 Deep learning at colliders: Arjo Buijs (Universitat Heidelberg)
 CPPE quantum radiative corrections (CPPE)

Hands on sessions
 Statistics: Guillaume Moreux (CEA-IRFU, Saclay)
 Introduction to machine learning tools: David Rousseau (ECLab, Orsay)
 Advanced machine learning: Veronica Sanz (Universidad de Valencia, University of Sussex)

Organizing Committee
 Jean-Thomas LEC, Co-Chair
 Et. Chubert (EPC, Strasbourg)
 Nicolas Cozou (EPHE, Marseille)
 Yann Cozou (CPPE, Marseille, chair)
 Zahra Cozzi (Research, CPPE, Clermont)
 Roman Mader (LPC, Clermont-Ferrand)
 Guillaume Moreux (CEA-IRFU, Saclay)
 David Rousseau (ECLab, Orsay)

Administrative Support
 Angélique Pape (CPPM, Marseille)

<https://indico.in2p3.fr/e/sos2022>

- This school received financial support from



Institut
Physique de
l'Univers
Aix-Marseille Université



P2IO
Physics of 2 Infinities and Origins

- Thanks to the Miléades team
- They gave me a lot of positive feedback on your behaviour: good job!

▶ <https://indico.in2p3.fr/e/SOS2022>

▶ <https://sos.in2p3.fr>



The poster for the IN2P3 School of Statistics 2022, held from May 16-20 in Carry-le-Rouet. It features the SOS School of Statistics logo at the top. The main title is 'IN2P3 School of Statistics 2022' with the dates 'May 16-20 Carry-le-Rouet'. Below the title, it lists the 'Scientific Programme Course' and 'Hands on sessions'. A central graphic shows a stylized map of France with a highlighted region. The 'Organizing Committee' is listed as: Jean Rousseau (LPC, Clermont Ferrand), Éric Chabert (IPHC, Strasbourg), Yann Coadou (CPPM, Marseille, chair), Sabine Crépe-Renaudin (LPC, Clermont Ferrand), Romain Madar (LPC, Clermont Ferrand), Guillaume Mention (CEA/IRFU, Saclay), and David Rousseau (IJCLab, Orsay). Logos for CFE, CPPM, and IJCLab are also present. At the bottom, it mentions 'Administrative Support: Angélique Pèpe (CPPM, Marseille)' and provides the URL <https://indico.in2p3.fr/e/sos2022>.

▶ <https://indico.in2p3.fr/e/SOS2022>

▶ <https://sos.in2p3.fr>

Organising committee

- Johan Bregeon (LPSC, Grenoble)
- Éric Chabert (IPHC, Strasbourg)
- Nicolas Chanon (IP2I, Lyon)
- Yann Coadou (CPPM, Marseille) –chair–
- Sabine Crépe-Renaudin (LPSC, Grenoble)
- Romain Madar (LPC, Clermont-Ferrand)
- Guillaume Mention (CEA/IRFU, Saclay)
- David Rousseau (IJCLab, Orsay)

Local support at CPPM

- Angélique Pèpe, Véronique Roux



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May 16-20 Carry-le-Rouet

Scientific Programme
Course
Basic concepts of statistics: Romain Madar (LPC, Clermont-Ferrand)
Classical interval estimation, ANOVA, systematic and beyond: Nicolas Berger (LAPP, Annecy)
Introduction to machine learning: Vincent Barra (LIMOS, Clermont-Ferrand)
Performance metrics: Biased decision trees: Yann Coadou (CPPM, Marseille)
Introduction to deep learning: Veronica Sanz (Universitat de Valencia, University of Sussex)
Deep learning at colliders: Anja Butter (Universität Heidelberg)
CPPM quantum initiatives: Sofia Vallecorsa (CERN)

Hands on sessions
Statistics: Guillaume Mention (CEA/IRFU, Saclay)
Introduction to machine learning tools: David Rousseau (IJCLab, Orsay)
Advanced machine learning: Veronica Sanz (Universitat de Valencia, University of Sussex)

Organizing Committee
Jean-Christophe LPMC, Grenoble
Dr. Chabert ITP, Strasbourg
Nicolas Coadou (IIT) (CPPM)
Yann Coadou (CPPM, Marseille, chair)
Sofia Vallecorsa (CERN, University of Sussex)
Romain Madar (LPC, Clermont-Ferrand)
Guillaume Mention (CEA, IRFU, Saclay)
David Rousseau (IJCLab, Orsay)

Administrative Support
Angélique Pape (CPPM, Marseille)

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Lecturers

- Romain Madar (LPC, Clermont-Ferrand)
- Vincent Barra (LIMOS, Clermont-Ferrand)
- Yann Coadou (CPPM, Marseille)
- Guillaume Mention (CEA/IRFU, Saclay)
- Nicolas Berger (LAPP, Annecy)
- David Rousseau (IJCLab, Orsay)
- Veronica Sanz (Universities of Valencia and Sussex)
- Anja Butter (ITP Universität Heidelberg)
- Sofia Vallecorsa (CERN)

Survey from indico

Please fill in the [survey](#) about the school in the coming days or from the main page <https://indico.in2p3.fr/e/SOS2022>

Practicalities

- Bus departure for Aix-TGV at **13h45**, parking by restaurant: be on time!
- Please put your badge in the box before leaving if you don't need it

French ML list

machine-learning-l@in2p3.fr

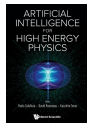
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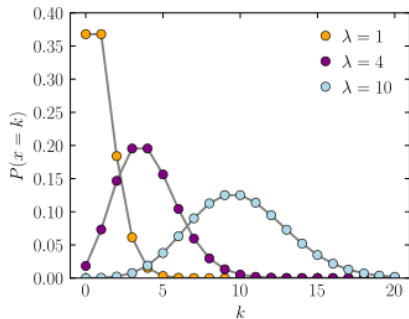
- send a mail to listserv@in2p3.fr
- with message body: subscribe machine-learning-l Firstname Lastname

Reference book (out since March 2022)

Artificial Intelligence for High Energy Physics

<https://doi.org/10.1142/12200>





```
import scipy.stats
scipy.stats.poisson
```

