

---

# Stochastics, dynamics, and geometry



A workshop in honour of Peter Baxendale

Wednesday June 7 until Friday/Saturday June 9/10 2023

**Organisers: Ludwig Arnold, David Elworthy, N. Sri Namachchivaya**

The scientific programme will consist of 25+5 minute talks on Thursday and Friday.

Wednesday evening, June 7: Arrival,

Thursday, June 8: Morning, afternoon: Scientific programme

Friday, June 9: Morning, afternoon: Scientific programme

Saturday, June 10: Departure

There will be a get-together in the evening of Wednesday at a Kenilworth Pub. Kenilworth is recommended as a good place to stay unless you can, and prefer to, stay on campus.

## Registration

Registration can be made via the link at the right hand side of the page.

**Please note** that our standard form has a section mentioning the arrangement of accommodation - please ignore this question as, on this occasion, all accommodation is to be arranged by participants.

## PLEASE NOTE

There will be North-East & Midlands Stochastic Analysis (**NEMSA**) seminars preceding this meeting: on Tuesday afternoon and Wednesday. If you arrive early enough to join any, or all, of it you would be very welcome. The speakers are Helena Kremp, Simha Mehri, Anton Thalmaier, Karen Haberman, Mohammud Foondun, Feng-Yu Wang, Lorenzo Zambotti, and Massimiliano Gubinelli. See [https://warwick.ac.uk/fac/sci/statistics/news/hb\\_workshop/](https://warwick.ac.uk/fac/sci/statistics/news/hb_workshop/) for the programme and for registration. Registration is free, but requested, in order to know numbers; and essential if you are able to join us for lunch etc.

## Stochastics, Dynamics and Geometry Workshop Programme

**Wednesday, June 7: Arrival**, Get-Together from 18.00 (6 pm) at Virgins & Castle Pub (Garden Room), 7 High St, Kenilworth

**Scientific Programme: Lecture Room MS 02, ground floor of Maths Building**

**Thursday, June 8:**

9.00-10.00: Reception Desk of Math Institute (Zeeman Building) : name badges, programme copies, maps

**Morning session:** Chairman: David Elworthy

10.00-10.05 David Elworthy: Welcome

10.05-10.35 Ludwig Arnold: How it All Began

10.35-11.05 N. Sri Namachchivaya: Almost-Sure Stability of the Single Mode Solution of a Noisy Nonlinear Autoparametric System

11.05-11.30 Coffee Break

11.30-12.00 Jonathan Mattingly: Ergodicity and Positive Lyapunov exponents for Random Switching

12.00-12.30 Tommaso Rosati: Lyapunov exponents for SPDEs beyond order preservation

12.30-13.00 Jeroen Lamb: On the nature of chaos in random dynamical systems

Lunch on campus

**Afternoon Session:** Chairman: Chris Rogers

14.00-14.30 Martin Rasmussen: Random dynamical systems with bounded noise: a boundary mapping

approach

14.30-15.00 Michael Scheutzow: Stability and instability of a planar RDS

15.00-15.30 Maximilian Engel: Quantitative estimates on finite-time Lyapunov exponents in a stochastic bifurcation model

15.30-16.00 Coffee Break

16.00-16.30 **Teams Talk:** Richard Sowers: A Kolmogorov diffusion with a Boundary Condition

16.30-17.00 **Teams Talk:** Denis Bell: Divergence operators and Transformations of Measure in Infinite-dimensional Space

17.00-17.30 **Teams Talk:** Alexandra Neamtu: Bifurcation theory for SPDEs: finite-time Lyapunov exponents and amplitude equations

**Evening: Conference Dinner: Buffet in the Maths Common Room**

19.00 (7 pm), Payment: 36 GBP per person including wine

Please pay in advance using this [link](#)

Please note this link is completely secure and you will receive a receipt when you complete the transaction. Please select 'Conference Dinner', insert £36, and select 'other' when prompted.

**Friday, June 9:**

**Morning Session:** Chairman: Ludwig Arnold

10.00-10.30 Terry Lyons: Rough Paths in Data Science

10.30-11.00 Wilfrid Kendall: Wandering around a fibrous network when all the paths look very much alike

11.00-11.30 Coffee Break

11.30-12.00 Yves Le Jan: Beyond flows of continuous maps: Some open questions

12.00-12.30 Alex Blumenthal: Quenched statistical laws and the two-point process

Lunch on campus

**Afternoon Session:** Chairman: N.Sri Namachchivaya

14.00-14.30 Xue-Mei Li: Fractional Dynamics

14.30-15.00 Hans Crauel: An elementary proof of the equivalence of ergodicity and extremality for invariant measures

15.00-15.30 Huaizhong Zhao: Ergodicity of non-stationary stochastic processes

15.30-16.00 Coffee Break

16.00- 16.30 Bjoern Schmalfuss: Averaging of a slow-fast system driven by fractional Brownian motions

16.30-17.30 Peter Baxendale: Stochastic flows, stochastic bifurcations, and all that

**Evening:** Farewell at Abbey Field Hotel, Kenilworth, 19:00 (7 pm) (*choice of meals to be made in advance*)

**Saturday, June 10:** Departure

### Hotel Accommodation

For accommodation on Warwick campus in either Scarman or Radcliffe conference centres, please click [here](#)

If you prefer to stay off campus, Kenilworth has several pleasant hotels in which to stay, please see the links of 2 below that we would recommend:

[The Abbey Field](#)

[Holiday Inn](#)

Please note: The University of Warwick is located on the outskirts of the city of Coventry but the nearest town is Kenilworth.

### Useful Links for you stay with us at Warwick:

#### Travelling to Campus:

click [here](#) and follow the associated links on this webpage for details of how to get to campus:

#### Eating on Campus:

Click [here](#) and [here](#) to find places to eat on campus, from restaurants and bars to coffee shops and cafes.



- [How to get here](#)

See also:

[Mathematics Research Centre](#)

[Mathematical Interdisciplinary Research at Warwick \(MIR@W\)](#)

[Past Events](#)


[Past Symposia](#)

**Internet Access at Warwick:**

Where possible, visitors should obtain an EDUROAM account from their own university to enable internet access whilst at Warwick.

If you need **WiFi** whilst at Warwick, click [here](#) for instructions (upon arrival at Warwick)

**Registration:**

You can register for any of the symposia or workshops online. To see which registrations are currently open and to submit a registration, please click [here](#) .

**Contact:**

Mathematics Research Centre

Zeeman Building

University of Warwick

Coventry CV4 7AL - UK

**E-mail:**

[MRC@warwick.ac.uk](mailto:MRC@warwick.ac.uk)

---

## Contacting Us

[Undergrad and Postgrad admissions](#)

[Other contacts](#)

## Finding Us

Mathematics Institute

Zeeman Building

University of Warwick

Coventry CV4 7AL

[Directions](#)

 [Staff Intranet - Alumni site](#)



---

Page contact: [Alison Humphries](#)

Last revised: Fri 2 Jun 2023

Powered by [Sitebuilder](#) | © MMXXIII | [Terms](#) | [Privacy](#) | [Cookies](#) | [Accessibility](#)

| [Modern Slavery Statement](#)

