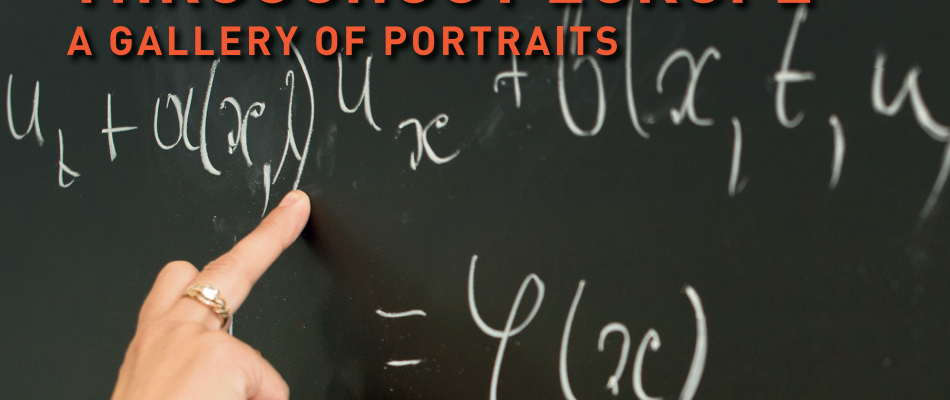


# WOMEN OF MATHEMATICS THROUGHOUT EUROPE

A GALLERY OF PORTRAITS







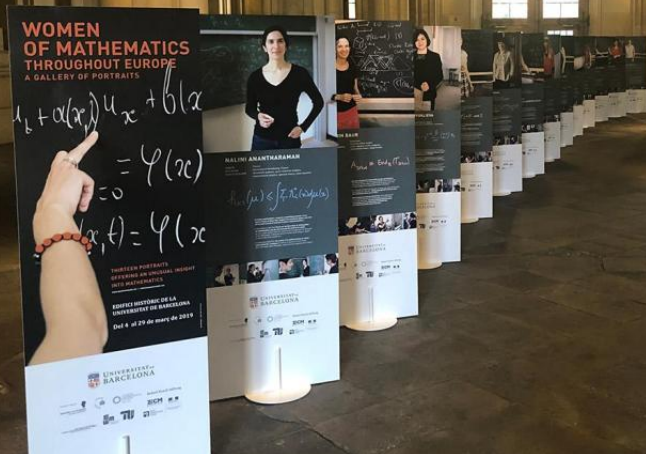
Nalini Anantharaman (Strasbourg): mathematical physics, dynamical systems...



**“It is a privilege to create beautiful things without having to worry about their applications.”**

Nalini Anantharaman

# THE EXHIBITION IN BARCELONA



## WOMEN OF MATHEMATICS THROUGHOUT EUROPE

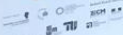
A GALLERY OF PORTRAITS

$$u'_x + a(x)u_x + b(x)u = \varphi(x)$$
$$u(x_0) = 0$$
$$u(x, t) = \varphi(x)$$

THIRTEEN PORTRAITS OFFERING AN ORIGINAL INSIGHT INTO MATHEMATICS

EDIFICI HISTÒRIC DE LA UNIVERSITAT DE BARCELONA  
Del 4 al 29 de març de 2019

UNIVERSITAT DE BARCELONA





Frances Kirwan (Oxford): algebraic and symplectic geometry.



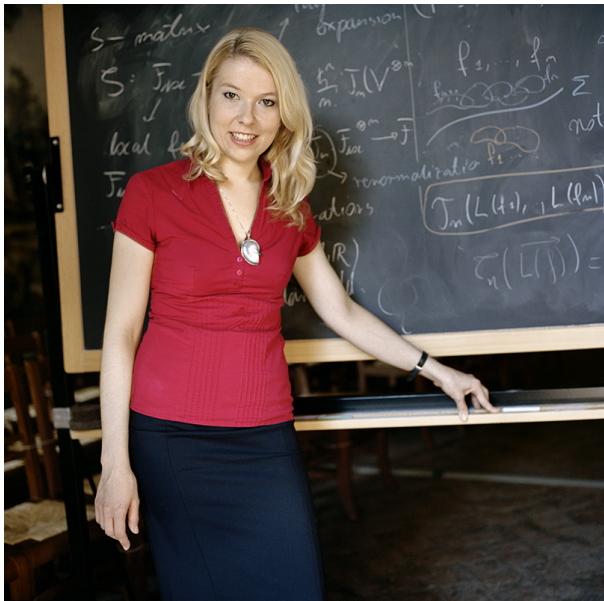
**“..the Mathematics Department insisted on addressing me as ‘Mr’ F Kirwan in all official correspondence.”**

Frances Kirwan

# THE EXHIBITION IN LA HABANA







Kasia Rejzner (York): mathematical physics, operator algebras...

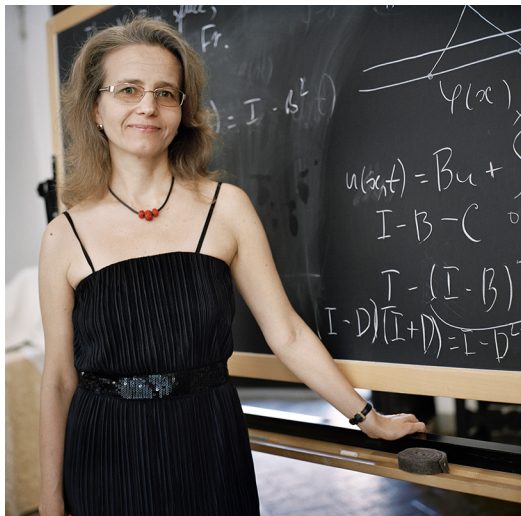


**“Making a mistake should not be a reason for getting discouraged.”**

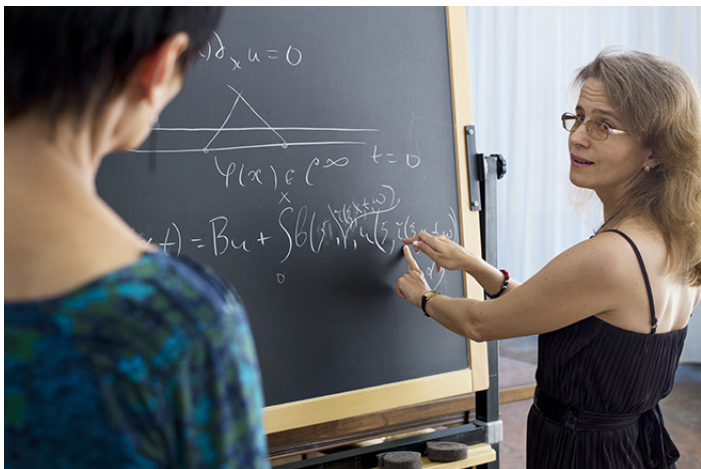
Kasia Rejzner

# THE EXHIBITION IN BOGOTA





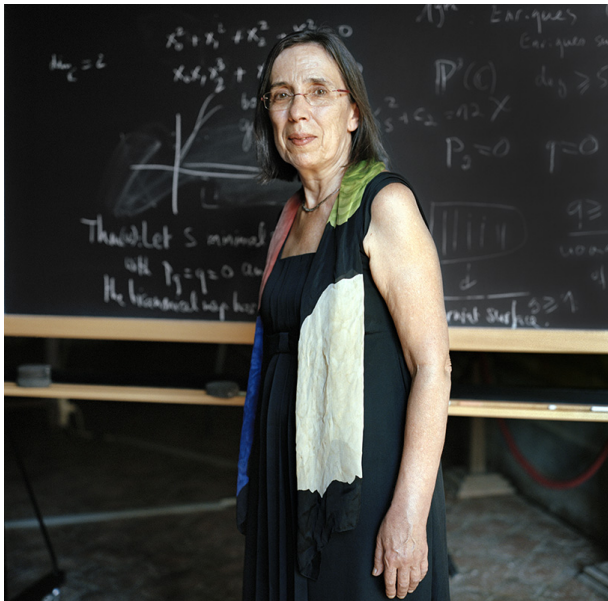
Irina Kmit (Berlin): hyperbolic differential equations, bifurcation and stability analysis...



**“[Mathematics] is a language without borders.”**  
Irina Kmit

# THE EXHIBITION IN TORINO





Margarida Mendes Lopes (Lisbon): algebraic geometry.



**“[I] felt rather isolated in Lisbon before the era of internet and Skype.”**

Margarida Mendes Lopes



# THE EXHIBITION IN SINGAPORE





Karin Baur (Graz): cluster algebras, categorification...



**“Seeing very young people die of serious illnesses [...] convinced me that I’d rather study mathematics than medicine.”**

Karin Baur

# THE EXHIBITION IN NANCY

## WOMEN OF MATHEMATICS THROUGHOUT EUROPE A GALLERY OF PORTRAITS

A GALLERY OF PORTRAITS

$$y'' + a(x)y' + b(x)y = \varphi(x)$$
$$= \varphi(x)$$
$$= 0$$
$$y(x, t) = \varphi(x)$$

THIRTEEN PORTRAITS  
OFFERING AN UNUSUAL INSIGHT  
INTO MATHEMATICS



**NALINI ANANTHARAMAN**

UNIVERSITY OF CHICAGO  
1982-2012

Professor of Mathematics, Harvard  
University, and former professor at the  
University of California, Berkeley, and  
the University of Michigan.

$$P_{\text{KMS}}(\mu) \leq \int \mathbb{1}_{\mathbb{R}^+}(\omega) \mu(\omega)$$

She is a recipient of the  
Fellowship of the Royal Society  
(2011), the Clay Mathematics  
Institute Research Award (2010),  
and the American Mathematical  
Society's Chauvenet Prize (2009).



**KATRIN WENDLAND**

UNIVERSITY OF  
DUISBURG  
1982-2012

Professor of Mathematics, University  
of Duisburg-Essen, Germany. She is  
also a member of the American  
Mathematical Society.

$$E_n(x) = \gamma(E_{n-1})$$
$$= \int \gamma(x) \mu(E_{n-1})$$

She is a recipient of the  
Fellowship of the Royal Society  
(2011), the Clay Mathematics  
Institute Research Award (2010),  
and the American Mathematical  
Society's Chauvenet Prize (2009).



**STEFKA BOUVUKLIEVA**

UNIVERSITY OF  
SOFIA  
1982-2012

Professor of Mathematics, Sofia  
University, Bulgaria. She is also  
a member of the American  
Mathematical Society.

$$\sum_{k=0}^{n-1} \binom{n-1}{k} a_k = \sum_{k=0}^{n-1} \binom{n-1}{k} a_k$$

She is a recipient of the  
Fellowship of the Royal Society  
(2011), the Clay Mathematics  
Institute Research Award (2010),  
and the American Mathematical  
Society's Chauvenet Prize (2009).



Dušanka Perišić (Novi Sad): functional analysis, generalized function theories.



**“[maths at university] was rather different from what I had been taught at school!”**

Duška Perišić



# THE EXHIBITION IN BEIRUT



Alice Fialowski (Pécs): functional analysis, Lie theory...





**“Having to set and solve a problem on my own was very good training.”**

Alice Fialowski

# THE EXHIBITION IN GRAZ



BARBARA NELLI

1980  
BARBARA NELLI, GRAZ, 2011  
BARBARA NELLI, GRAZ, 2011

$$d \sqrt{\frac{100}{16 + 100}} = 10$$

BARBARA NELLI, GRAZ, 2011



KATARZYNA INASIASI REJZNER

1980  
KATARZYNA INASIASI REJZNER, GRAZ, 2011  
KATARZYNA INASIASI REJZNER, GRAZ, 2011

o-aria, piazaj-i-avis

KATARZYNA INASIASI REJZNER, GRAZ, 2011



KAIISA MATOMÄKI

1980  
KAIISA MATOMÄKI, GRAZ, 2011  
KAIISA MATOMÄKI, GRAZ, 2011

$$S(0, \infty) = \frac{1}{2}$$

KAIISA MATOMÄKI, GRAZ, 2011



ALICE PAHLJENSKI

1980  
ALICE PAHLJENSKI, GRAZ, 2011  
ALICE PAHLJENSKI, GRAZ, 2011

$$2 + \sqrt{10} + \sqrt{10} = 10$$

ALICE PAHLJENSKI, GRAZ, 2011





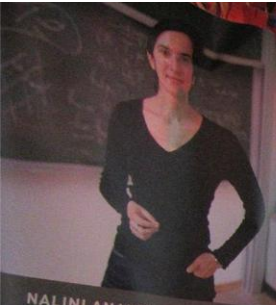
Katrin Wendland (Freiburg): geometry and quantum field theory.



**“The many different aspects of mathematics make it a very appealing subject.”**

Katrin Wendland

# THE EXHIBITION IN M'BOUR



**NALINI ANANTHARAMAN**

COUNTRY:  
AFFILIATION:  
FIELD OF RESEARCH:

France  
University of Strasbourg, France  
Mathematical physics, mathematical analysis,  
mathematical physics, quantum theory, and quantum

$$h_{\text{KS}}(\mu) \leq \int \mathbb{Z} N_{\text{KS}}(\omega, \mu)$$

On the left-hand side,  $h_{\text{KS}}(\mu)$  is the Kolmogorov-Sinai entropy of the flow  $\phi_t$  on the space  $(X, \mu)$ . On the right-hand side,  $N_{\text{KS}}(\omega, \mu)$  is the number of periodic orbits of length  $n$  in the space  $(X, \mu)$ . The inequality states that the entropy of the flow is bounded by the number of periodic orbits.



**DUŠANKA PERIŠIĆ**

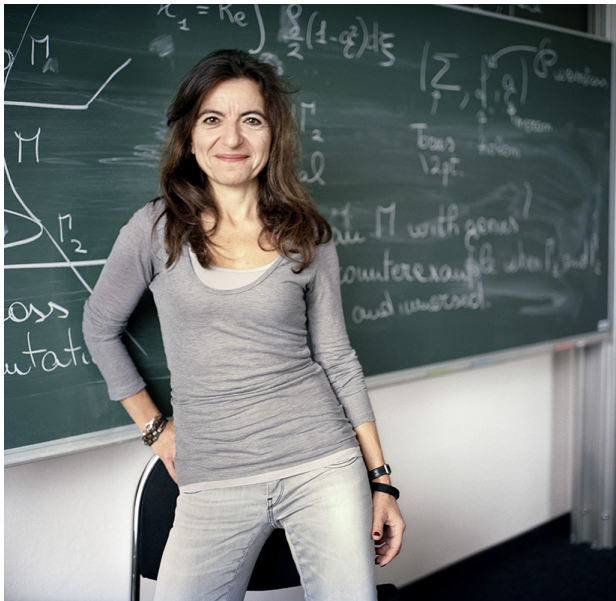
COUNTRY:  
AFFILIATION:  
FIELD OF RESEARCH:

Croatia  
University of Zagreb, Croatia  
Mathematical physics, mathematical analysis,  
mathematical physics, quantum theory, and quantum

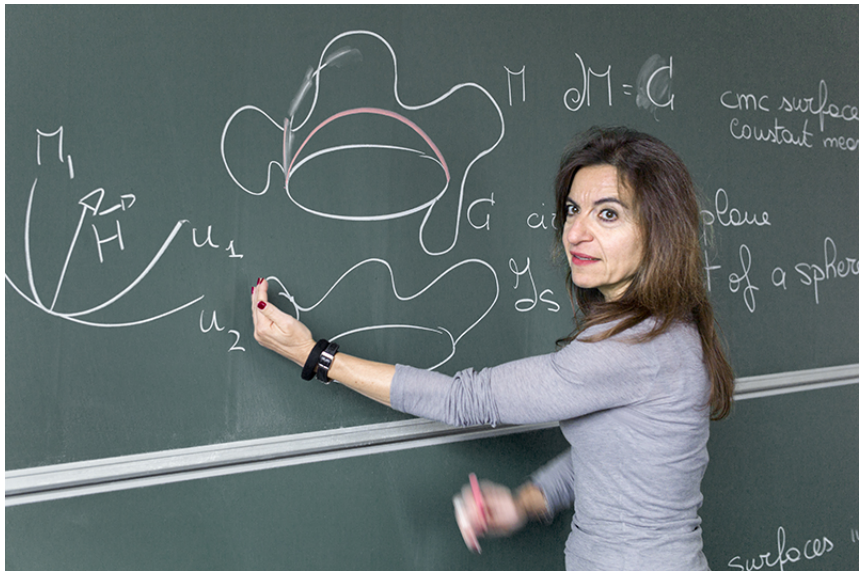
$$h_{\text{KS}}(\mu) \leq \int \mathbb{Z} N_{\text{KS}}(\omega, \mu)$$

On the left-hand side,  $h_{\text{KS}}(\mu)$  is the Kolmogorov-Sinai entropy of the flow  $\phi_t$  on the space  $(X, \mu)$ . On the right-hand side,  $N_{\text{KS}}(\omega, \mu)$  is the number of periodic orbits of length  $n$  in the space  $(X, \mu)$ . The inequality states that the entropy of the flow is bounded by the number of periodic orbits.





Barbara Nelli (L'Aquila): geometric analysis, minimal surfaces...



**“The application for [a] PhD fellowship meant taking a competitive exam [...]; I liked the challenge.”**

Barbara Nelli



## **THE EXHIBITION IN GENEVA**





Oksana Yakimova (Jena): algebraic groups and Lie algebras, Poisson structures...



**“At my first school [...] a female teacher spotted me and was pleased when I answered her questions.”**

Oksana Yakimova

# THE EXHIBITION IN RUSE





Kasia Matomaäki (Turku): number theory.



**"I had a lot of time to think about mathematics when I was on maternity leave for my first child."**

Kasia Matomäki

# THE EXHIBITION IN SOFIA



**KATARZYNA MASALSKA-BEJMER**

*Katarzyna Masalska-Bejmer*



**IRINA KMIT**

*Irina Kmit*



**FRANCES KIRWAN**

*Frances Kirwan*

with *Mathematics and Philosophy*

*Mathematics and Philosophy*





Stefka Bouyuklieva (Veliko Tarnovo): combinatorics, coding theory...

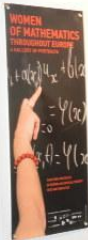


**"I feel happy solving a mathematical problem in the same way as my mother very much enjoys solving Sudoku games."**

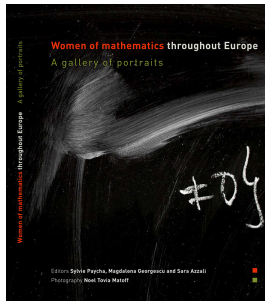
Stefka Bouyuklieva



# THE EXHIBITION IN QUITO



To know more: the catalogue




Pictures: Noël Matoff,  
Interview: Sylvie Paycha, Sara Azzali.  
**Extensions of the exhibition:**

## In Cambridge:




## In Santiago:



**SALOMÉ MARTÍNEZ SALAZAR**  
PhD  
Profesora de Ingeniería en la Universidad de Chile (1999)  
de Ingeniería de Telecomunicaciones

$$\frac{\partial u}{\partial t} = \frac{\partial}{\partial x} \left( \frac{\partial u}{\partial x} \right) + u(x, t) \quad u(0, t) = 0 \quad u(x, 0) = u_0(x)$$

...  
...  
...



**LORNA FIGUEROA MORALES**  
PhD  
Profesora de Matemática en la Universidad de Chile (1999)  
de Matemática

$$\chi(x, y) = \sum_{n=1}^{\infty} \sum_{m=1}^{\infty} \frac{1}{n^2 m^2} \sin(n\pi x) \sin(m\pi y)$$

...  
...  
...



**YBOM GARCÍA RAMOS**  
PhD  
Profesora de Matemática en la Universidad de Chile (1999)  
de Matemática

$$\liminf_{u \rightarrow \infty} T_u = T$$

...  
...  
...



**MARÍA SOLEDAD TORRES DÍAZ**  
PhD  
Profesora de Matemática en la Universidad de Chile (1999)  
de Matemática

$$E(\sigma, \sigma) = \frac{1}{2} \sigma^2 - \sigma^3$$

...  
...  
...

## In Kaiserslautern:



## Ongoing projects:

- ▶ Women of mathematics along the Mediterranean shores, including portraits of Sofia Labropoulou (Greece) and Marta Sanz Solé (Spain).
- ▶ Women of mathematics in Australia, including portraits of Rowena Ball, Asilata Bapat, Joan Lisaca, Cheryl Praeger , Jacqui Ramagge and Katherine Turner