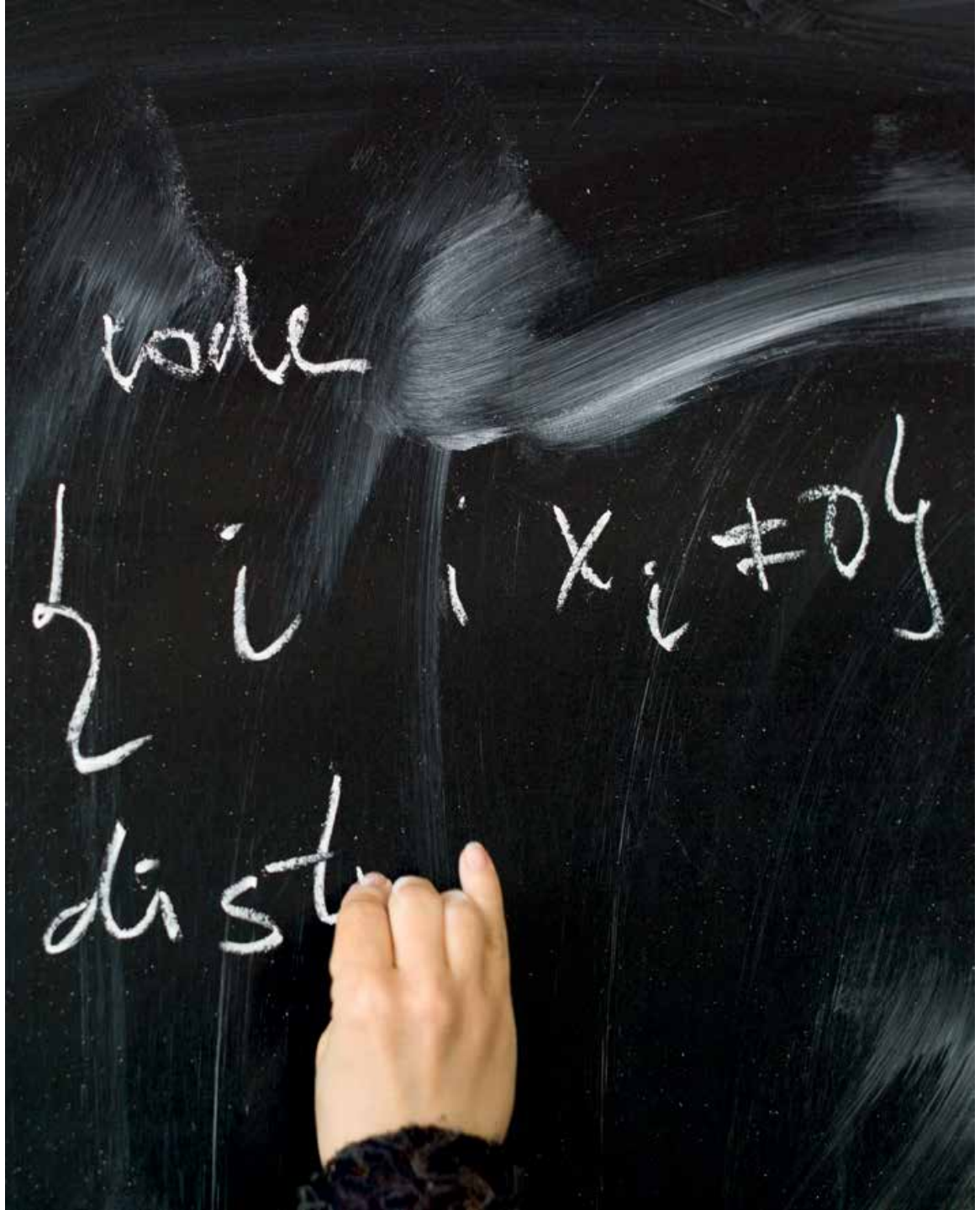
WOMEN IN MATHEMATICS FROM AROUND THE WORLD

A GALLERY OF PORTRAITS

WoMaP, Banff, 14th August 2023

Women of mathematics throughout Europe

A gallery of twenty three portraits



The short story of a long adventure

Noel Tovia Matoff
photographer

Sylvie Paycha
curator

How it all started: 2013

invitation by Charu Goel to deliver a talk in the
"Women in mathematics" platform at the University of Konstanz

WOMEN MATHEMATICIANS AROUND THE WORLD
A GALLERY OF TEN PORTRAITS

Alexandra Antoniouk (Ukraine)
Karin Baur (Switzerland/ Austria)
Luz Myriam Echeverry (Colombia)
Yukari Ito (Japan)
Marie Françoise Ouedraogo (Burkina Faso)
Dusanka Perisic (Serbia)
Cheryl Elisabeth Praeger (Australia)
Minping Qian (China)
Ramdorai Sujatha (India)
Jie Yang (China)

2014 First steps

Agnes Handwerk suggests an exhibition with portraits of mathematicians based in Europe

13 female mathematicians

Nalini Anantharaman (France)
Karin Baur (Switzerland, Austria)
Stefka Bouyuklieva (Bulgaria)
Alice Fialowski (Hungary)
Frances Kirwan (UK)
Irina Kmit (Ukraine/Germany)
Kaisa Matomäki (Finland)
Margarida Mendes Lopes (Portugal)
Barbara Nelli (Italy)
Dušanka Perišić (Serbia)
Katarzyna (Kasia) Rejzner (Poland/UK)
Katrin Wendland (Germany)
Oksana Yakimova (Russia/Germany)

Noel Matoff

The photographer

The team of mathematicians

Sara Azzali

Magdalena Georgescu

Alexandra Antoniouk

July 2016: Opening in Berlin (TU)

With the financial support of

Unterstützt von / Supported by

Alexander von Humboldt
Stiftung/Foundation

Robert
Bosch
Stiftung

Frankfurter Stiftung: maecenia für
Frauen in Wissenschaft und Kunst

Universität
Potsdam

2016-----2021

THE THIRTEEN PORTRAYED MATHEMATICIANS

Nalini Anantharaman (France)
Karin Baur (Switzerland, Austria)
Stefka Bouyuklieva (Bulgaria)
Alice Fialowski (Hungary)
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Stefka Bouyuklieva
Nalini Anantharaman
Oksana Yakimova
Irina Kmit
Alice Fialowski
Barbara Nelli
Dušanka Perišić
Katrin Wendland
Karin Baur
Kaisa Matomäki
Frances Kirwan
Kasia Rejzner
Margarida Mendes Lopes

TRAVELLED TO MORE THAN

137 VENUES

AROUND THE WORLD……

Barcelona, Universitat de Barcelona, March 2019

Bogotá, Universidad Nacional September 2017

Beirut Université Libanaise, Fanar February 2018

University of Gothenburg and Chalmers University of Technology Sweden April 2019

Universidad de la Havana
Cuba February 2017

Diyarbakir, Dicle University
Turkey May 2018

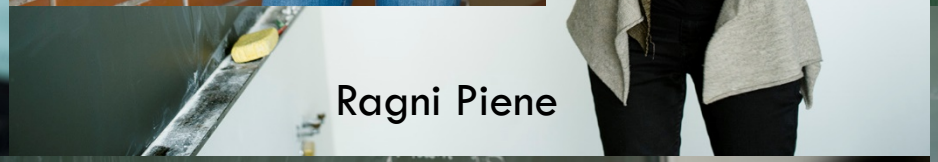
AIMS, Senegal in M'bour
May 2018

Quito, Pontificia Universidad Católica del Ecuador
August 2017

- SAINT DENIS (PARIS), FRANCE (II). October 2019
- SALZBURG, AUSTRIA. September 2017
- SANTIAGO, CHILE. March 2018
- SEVRAN, FRANCE. March 2017
- SOFIA, BULGARIA. February 2018
- SINGAPORE, REPUBLIC OF SINGAPORE. October 2018
- STRASBOURG, FRANCE.
- STUTTGART, GERMANY. November 2017
- SYDNEY, AUSTRALIA (I). May 2019
- SYDNEY, AUSTRALIA (II). August 2019
- TOKYO, JAPAN (I). March 2019
- TOKYO, JAPAN (II). October 2019
- TORINO, ITALY. April 2018
- TROMSØ, NORWAY. August 2019
- UTRECHT, THE NETHERLANDS. February 2017
- VALPARAISO, CHILE. January 2019
- VERONA, ITALY. May 2020
- VRATSA, BULGARIA. May 2017
- TÜBINGEN, GERMANY. November 2018
- TWENTE, THE NETHERLANDS. November 2017
- WARWICK, UK. October 2017

Saint Denis, Iqbal Masih school, October 2019

+ 7 mathematicians in 2019



= 20 portraits

The expanded catalogue with the 20 portraits in 2021

13 mathematicians

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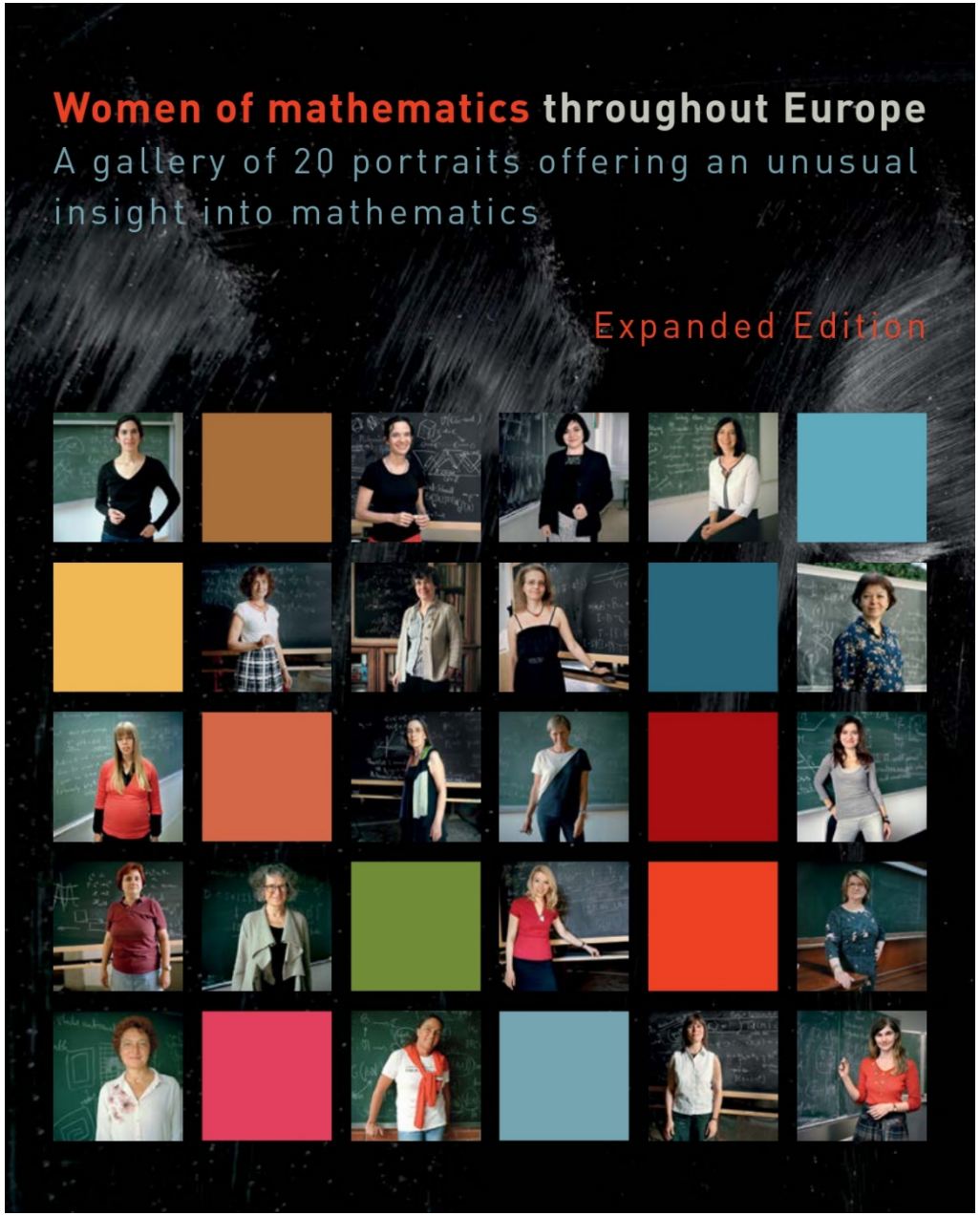


+ 7 mathematicians

Blaženka Divjak (Croatia)
Sofia Lambropoulou (Greece)
Neža Mramor Kosta (Slovenia)
Ragni Piene (Norway)
Marta Sanz-Solé (Spain)
Biljana Stamatović (Montengro)
Betül Tanbay (Turkey)

Villa de Leyva, Colombia, July 31st - August 9th 2023

Setting up the exhibition in the patio of the Hotel Santa Viviana….

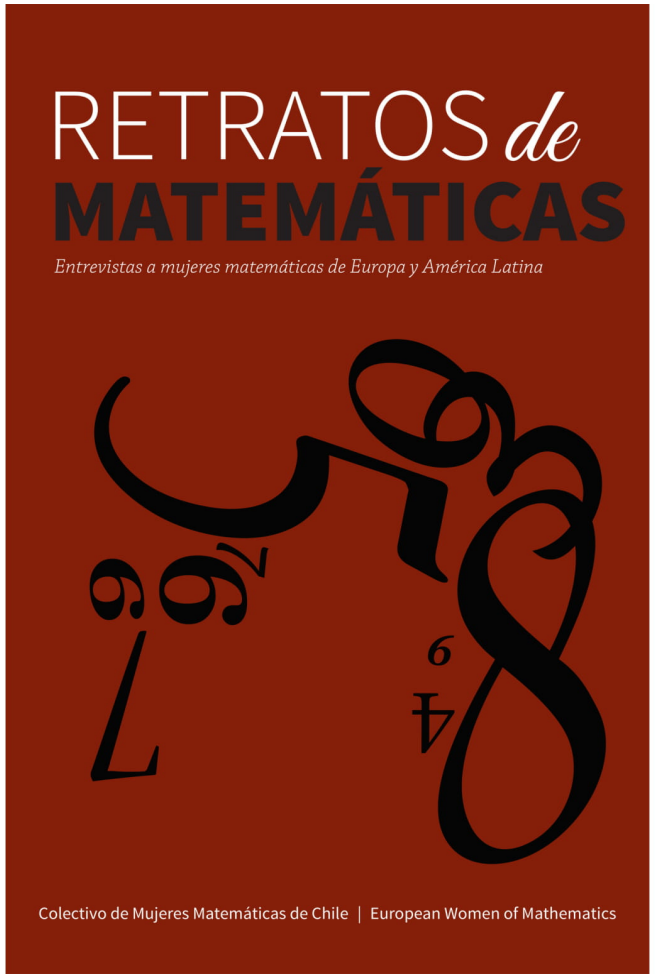
FURTHER EXPANSIONS AROUND THE WORLD

Mariel Saez, PUC Chile

South American women of mathematics

(2018-2020)

Carolina Bhering de Araujo (Brasil)
Carmen Cortázar Sanz (Chile)
Alicia Dickenstein (Argentina)
Lorna Figueroa Morales (Chile)
Yboon García Ramos (Peru)
Salomé Martínez Salazar (Chile)
Mónica Musso Polla (Italy/Chile)
Carolina Neira Jiménez (Colombia)
Amalia Pizarro Madariaga (Chile)
María Ofelia Ronco Vignau (Argentina)
María Soledad Torres Díaz (Chile)



11 portraits

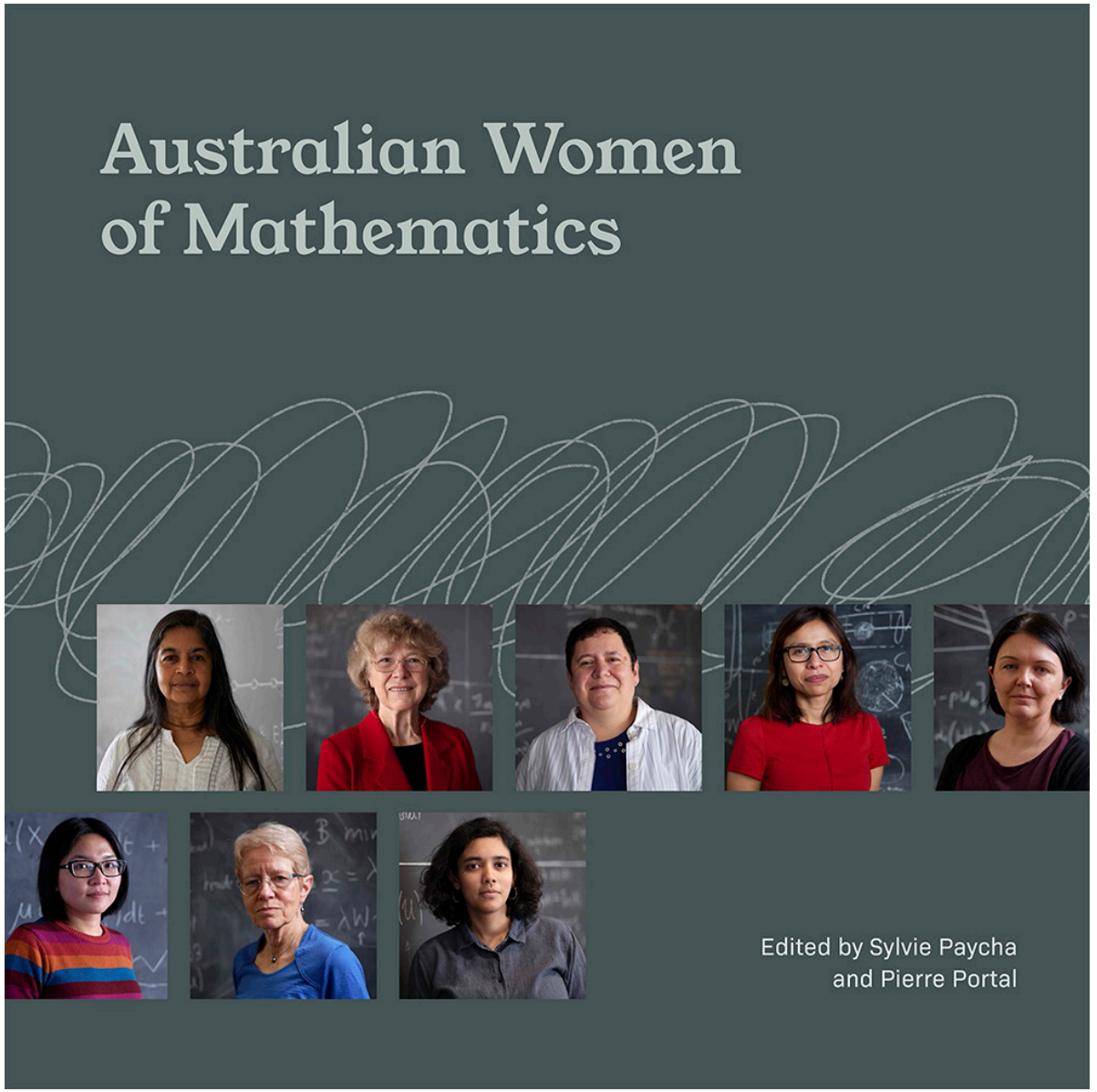
Australian women of mathematics (2019-2021)

Pierre Portal

ANU Canberra, Australia

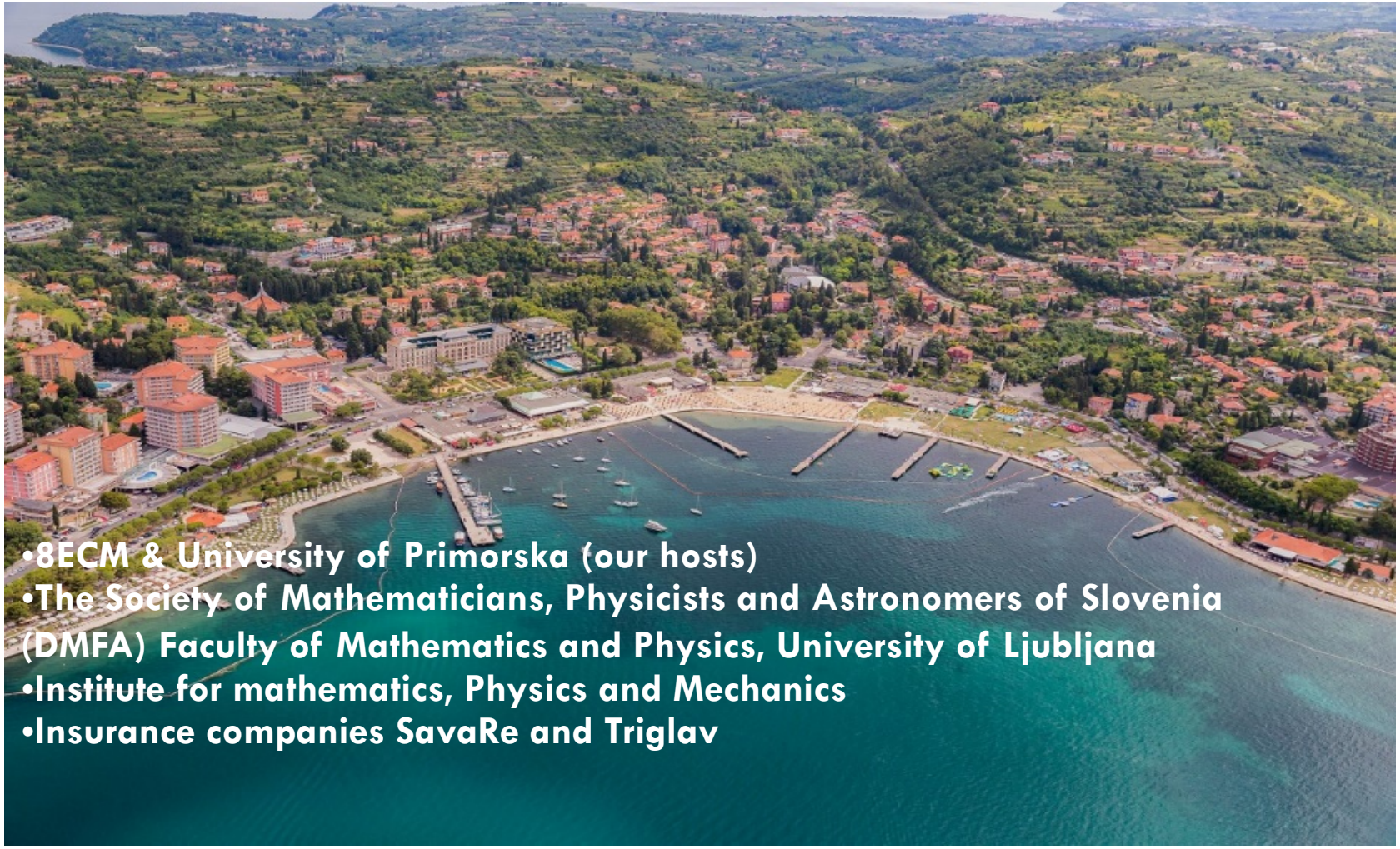
Amie Albrecht
Anita Liebenau
Asilata Bapat
Cheryl Praeger
Giang Nguyen
Inge Koch
Jacqui Ramagge
Jennifer Flegg
Joan Licata
Kate Smith-Miles
Katharine Turner
Maria Athanassenas
Nalini Joshi
Natalie Thamwattana
Rowena Ball
Sophie Calabretto

16 portraits



Five years later….. we were (virtually) at the 8th ECM in Portorož, thanks to…

Marjeta KRAMAR



Jasna PREZELJ

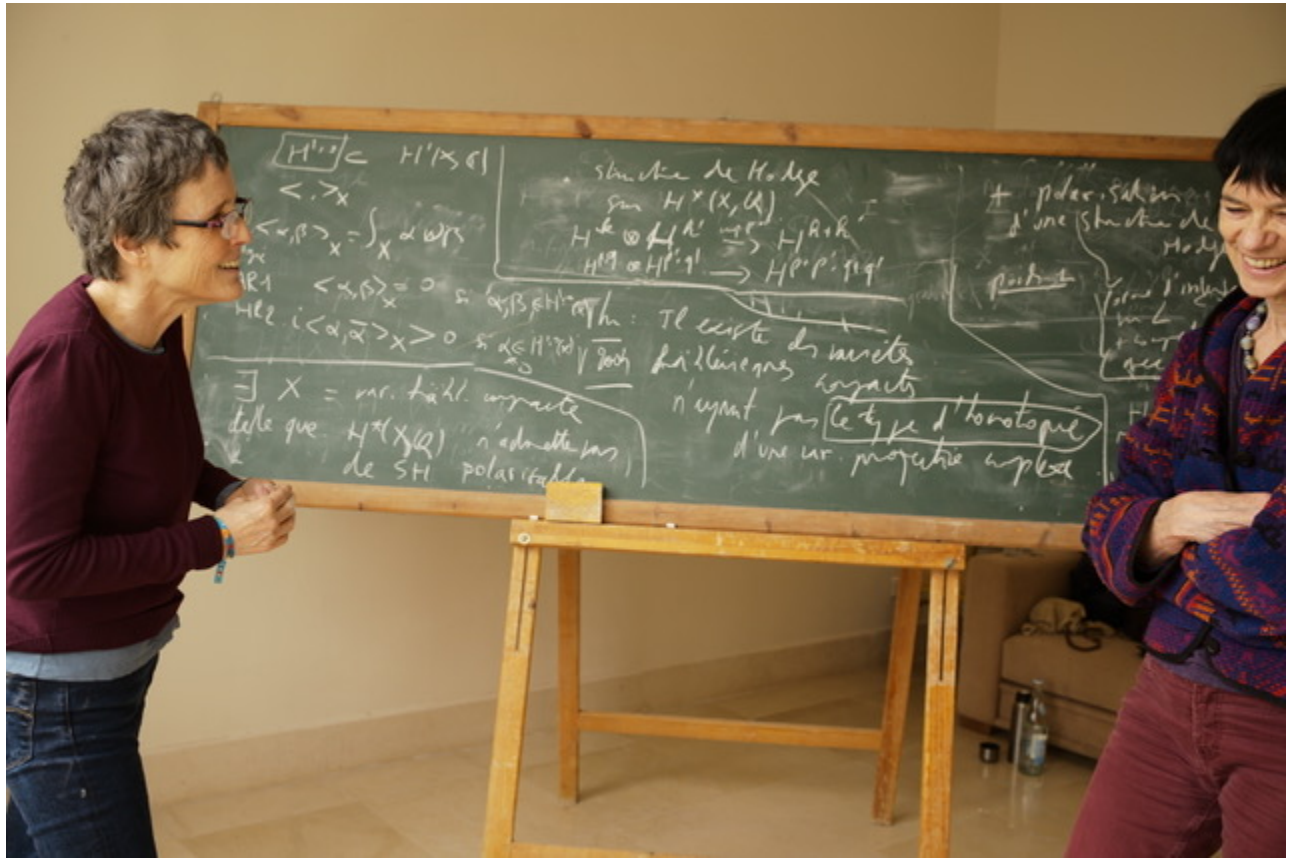
Neža MRAMOR-KOSTA

First steps towards a worldwide extension

Tunisia, 14-17 March 2022

CSMT2022

With portraits of Claire Voisin (France)



Sana Hizem and Saloua Alouadi (Tunisia)

Reiko Toriumi

Okinawa Institute of Science and Technology Graduate University

OIST, OKINAWA, JAPAN March 20-24 2023

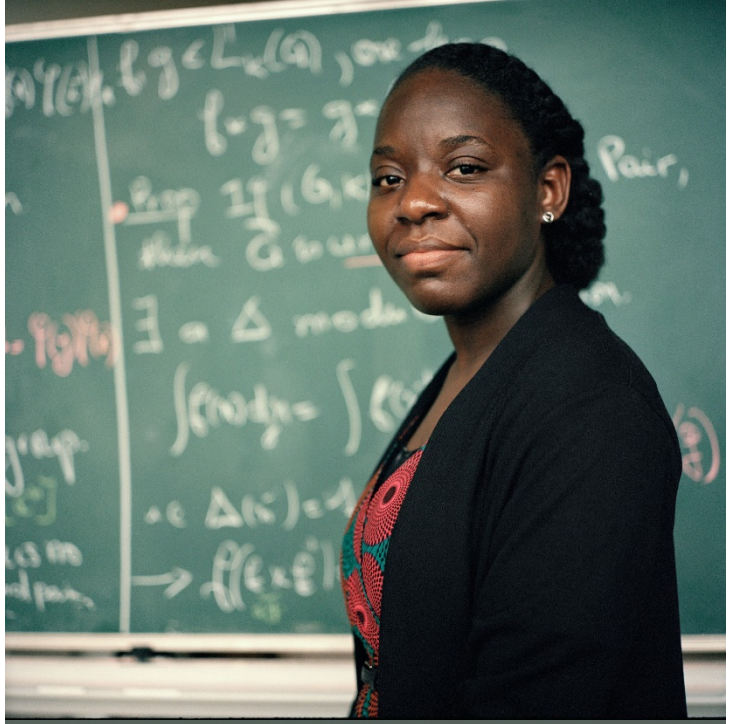
"Women at the intersection of mathematics and theoretical physics meet in Okinawa"

Yukari Ito

KAVLI IPMU

TOKYO

OIST, Okinawa, 20-24 March 2023



CORNELIE MITCHA MALANDA

COUNTRY	Republic of Congo
AFFILIATION	Faculty of Science and Technology of Marien Ngouabi University
RESEARCH TOPICS	Harmonic Analysis on Gelfand pair and representation theory of Lie group

$$C\left(L_K^1(G)\right) = \left[L_K^1(G),\ C^0\left(L_K^1(G)\right)\right]$$

$$\vdots$$

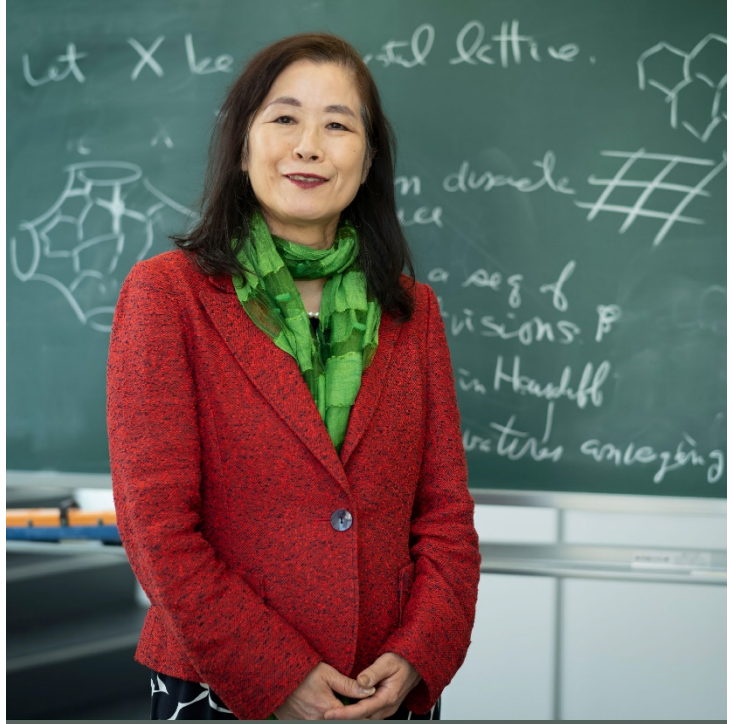
$$C^p\left(L_K^1(G)\right) = \left[L_K^1(G),\ C^{p-1}\left(L_K^1(G)\right)\right]$$

with $C^0\left(L_K^1(G)\right) = L_K^1(G)$

»The joy of math for me is that it feels like you've discovered something new when you understand something, even if it's not new in the literature out in the world. But it's new for you, and it feels exciting, like you're back to being a child again. "Oh, wow!" I'm so fascinated every time, like when I was a young child and saw chocolate for the first time, and I screamed in joy, like that. I think when I'm working to try to understand something, I'm just excited. Sometimes I don't want it to stop. I think to myself, if I stop here, I won't be able to learn anymore today. I have time left, I can still go on. It's kind of like an addiction. I got here today, but maybe if I push myself a bit harder, do it again, I'll learn more.«

»I would say [to a young woman entering the field of mathematics], just trust yourself. Be convinced. Be more confident. You will face challenges, you will be down sometimes, you will cry, that's true. But don't give up. You might feel down, you might want to cry, but you will stand up again. Continue on your way. The peace that you will feel from trying is so much better than living with regret all your life. You have the capacity to do everything you want in your life. You need to pay the price, sure, but you can do it. Be confident.«

Extension in construction.....



MOTOKO KOTANI

COUNTRY	Japan
AFFILIATION	Tohoku University
RESEARCH TOPICS	Discrete geometry

$$0 = \lim_{t \uparrow \infty} \left[(4\pi t)^{\frac{f}{2}} k(t, x, y) - c(x) \exp\left(-\frac{\mathrm{vol}(M)}{4t}\right) d_T(x, y)^3 \right]$$

»I was very shy as a child. I enjoyed reading books and studying, but not really talking to my classmates. I would read books, and ask my junior high and high school teachers questions. Not necessarily just in mathematics, but in many other fields. However, I found that the only subject where a child like me could talk on equal footing with the grown-ups – the teachers – was mathematics.«

»I chose mathematics despite not being very confident in my abilities. I made that decision because I thought, I only have this one life. If I do not do what I want, I will not get a "redo." I think you should do what you really want to do.«

»In terms of hardship, you struggle and struggle without any hints. You really want to understand, but you have no idea what to do. It is to the point where you are happy when you have any idea which direction to go, or an idea on how to move forward, even if it is not the best idea. I think many mathematicians experience this kind of frustration, but it is because of this frustration that you feel so happy when you finally have a breakthrough.«