

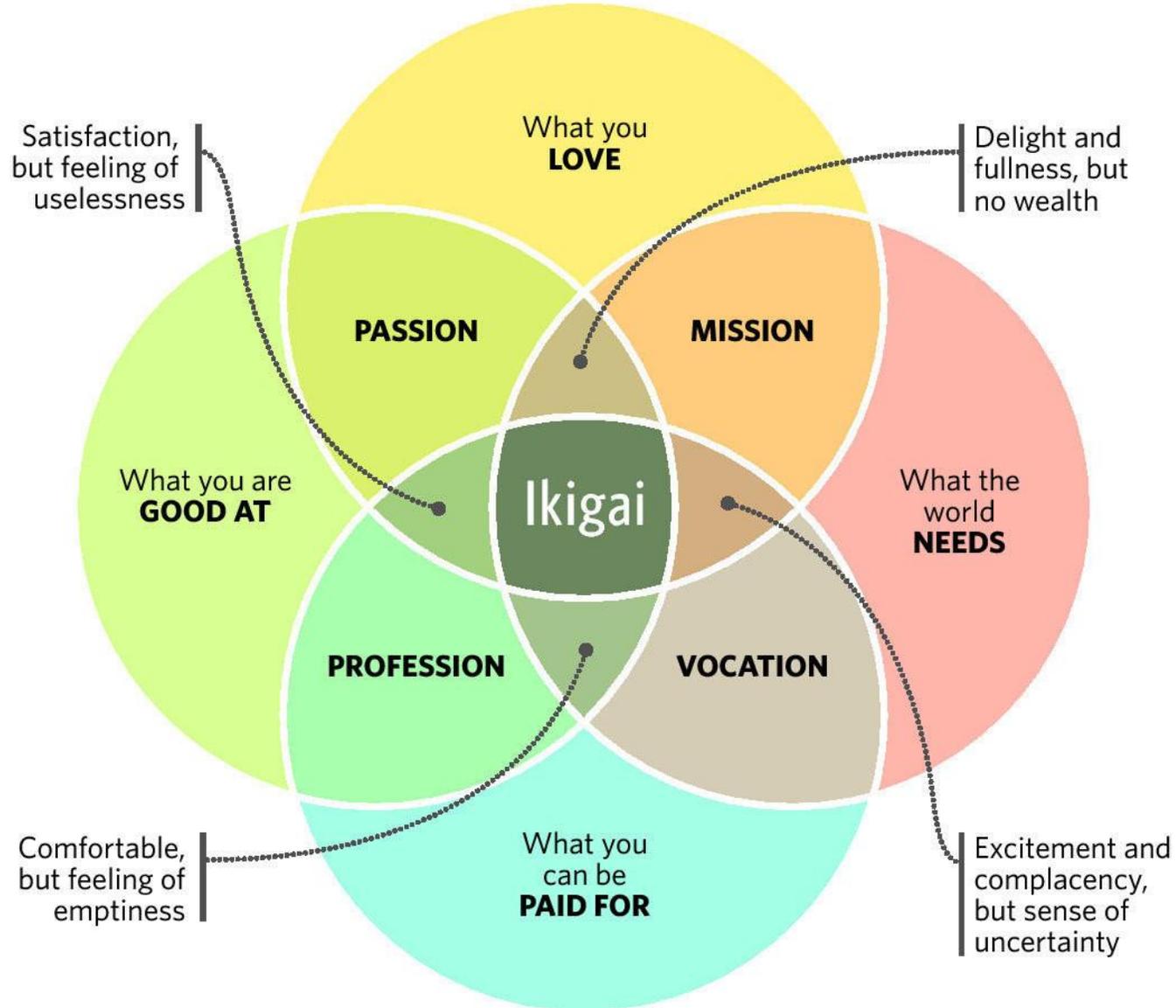
# Finding your Ikigai in Academia

Constanza Rojas-Molina  
CY Cergy Paris University (CYU)

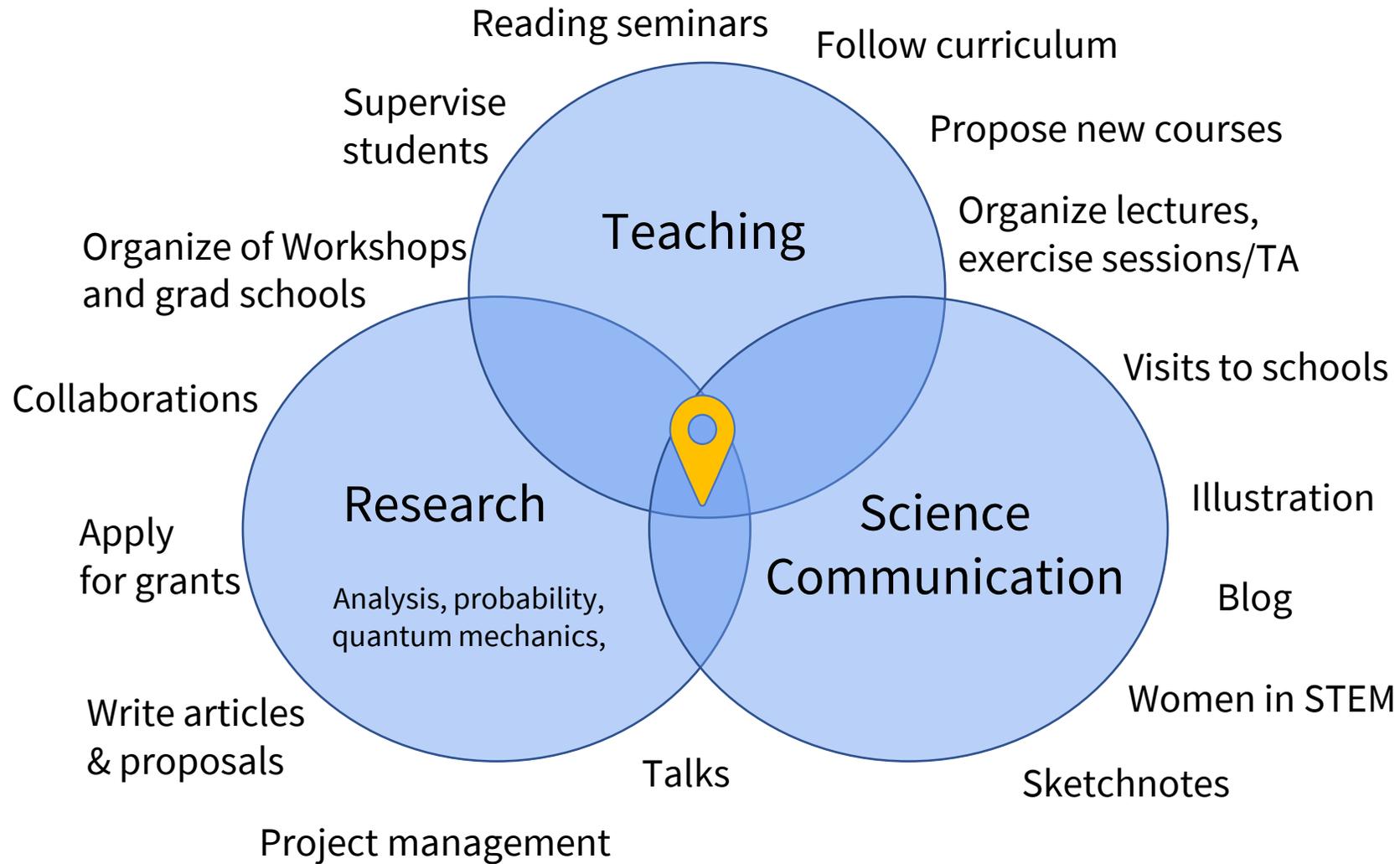


# Ikigai

A JAPANESE CONCEPT MEANING "A REASON FOR BEING"



# One of my slides for a Job interview in 2021



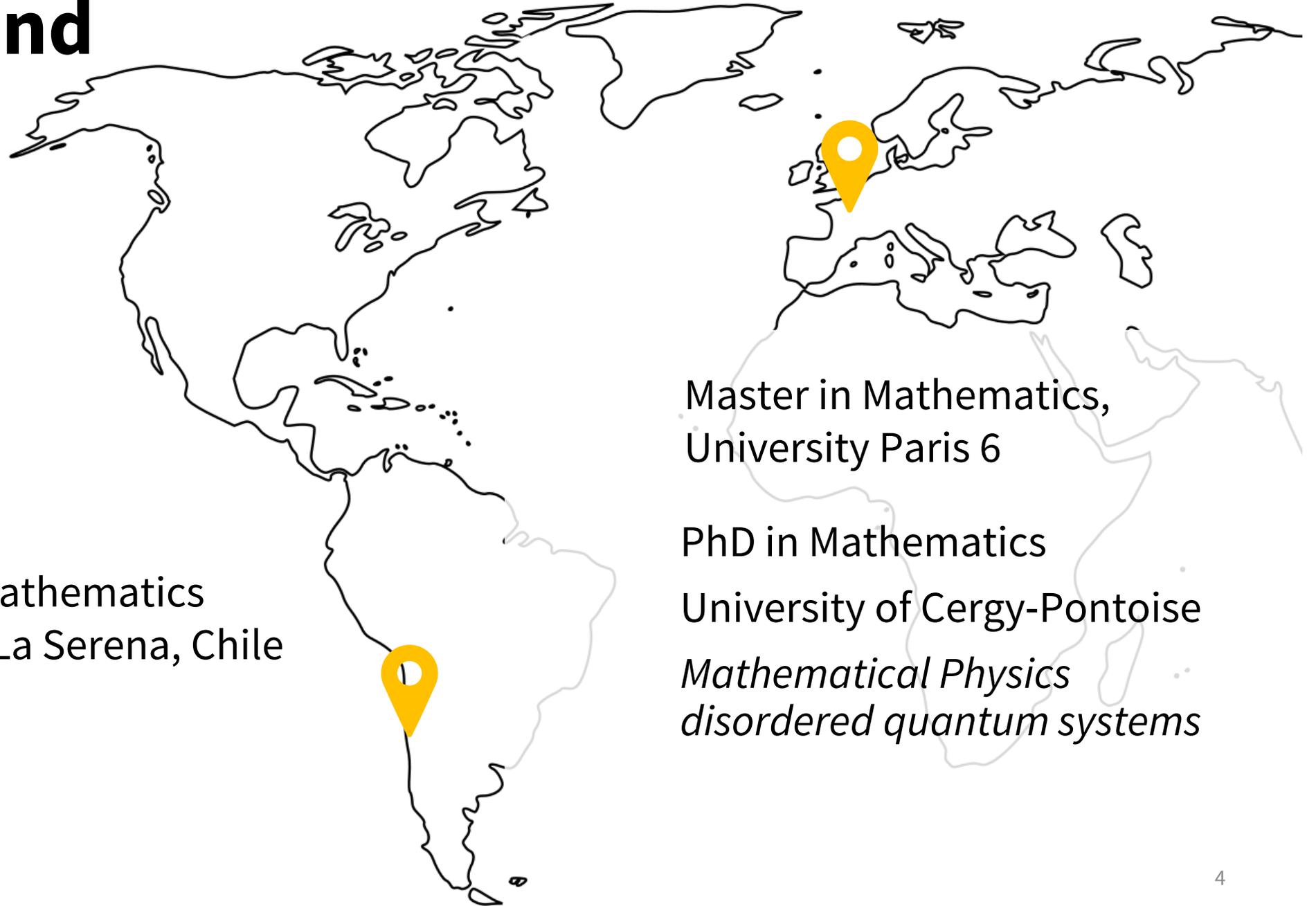
# Background

## Education

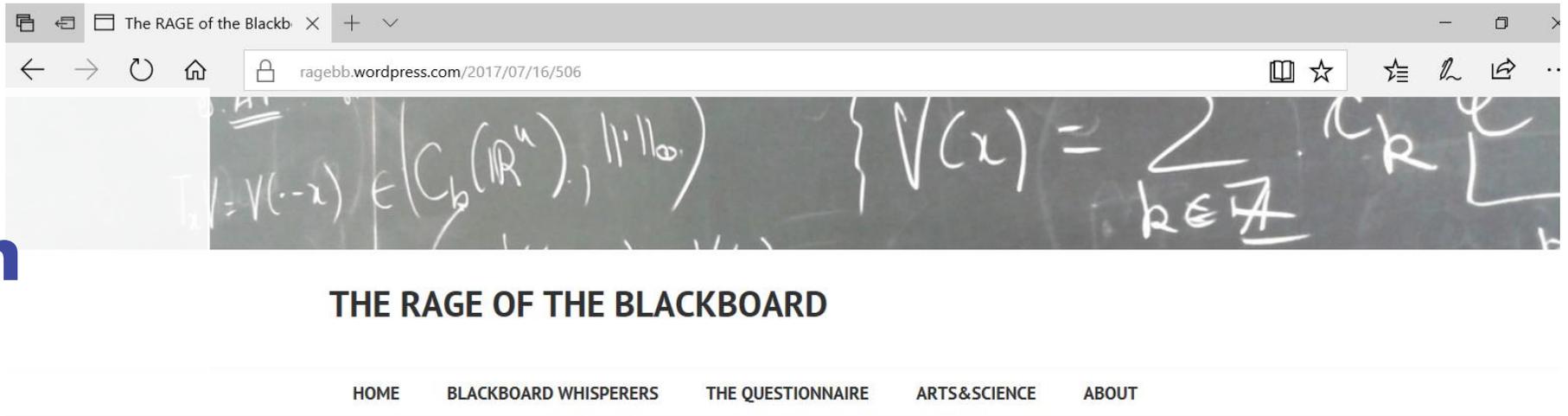
Bachelor in Mathematics  
University of La Serena, Chile

Master in Mathematics,  
University Paris 6

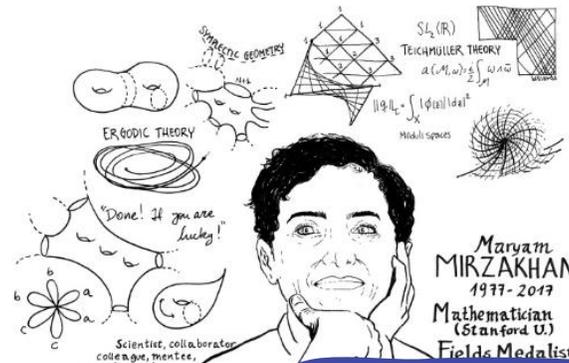
PhD in Mathematics  
University of Cergy-Pontoise  
*Mathematical Physics*  
*disordered quantum systems*



# Maths + scicomm



Posted on July 16, 2017 by CRM



Texts by C. R-M  
Illustrations by  
*E.A. Casanova*

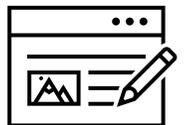


Postdoc  
University of Munich

Research only

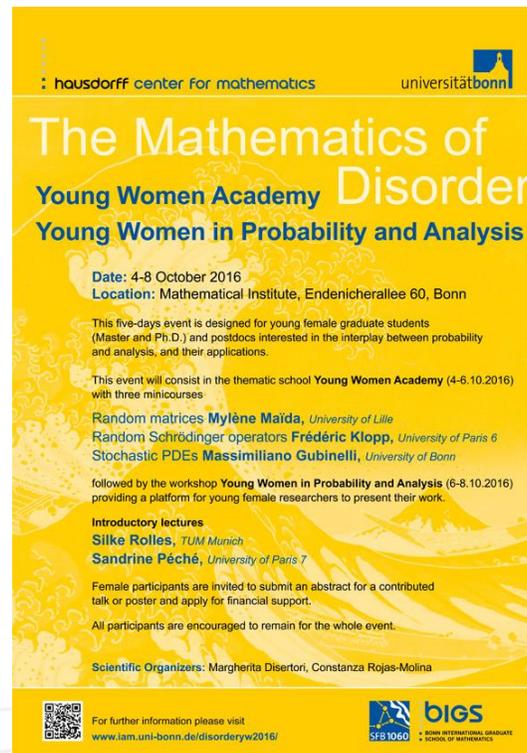
**Scicomm**

Blog The RAGE of the Blackboard  
Women in mathematics,  
Visualization, writing



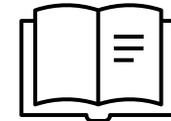
Follow ...

# Maths + scicomm



Sketchnoting and  
Graphic recording

Research



**Reading Seminars**  
**Master / undergrad**  
Analysis/Probability



Research

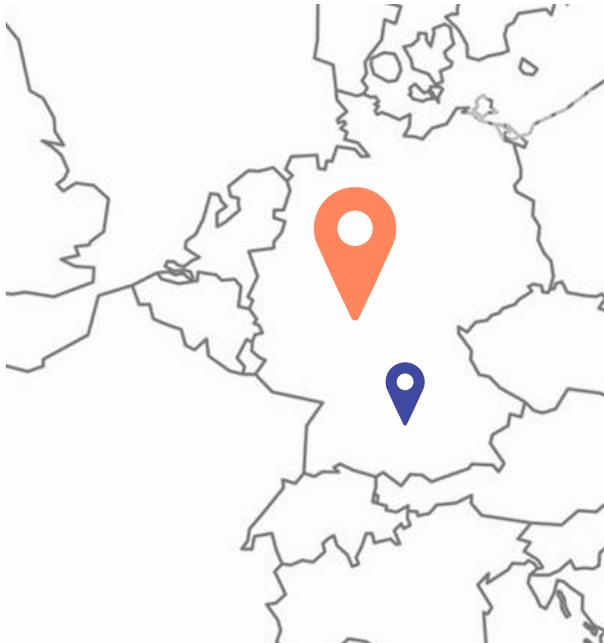
**Scicomm**

Blog The RAGE of the Blackboard  
Women in maths,  
Visualization, writing

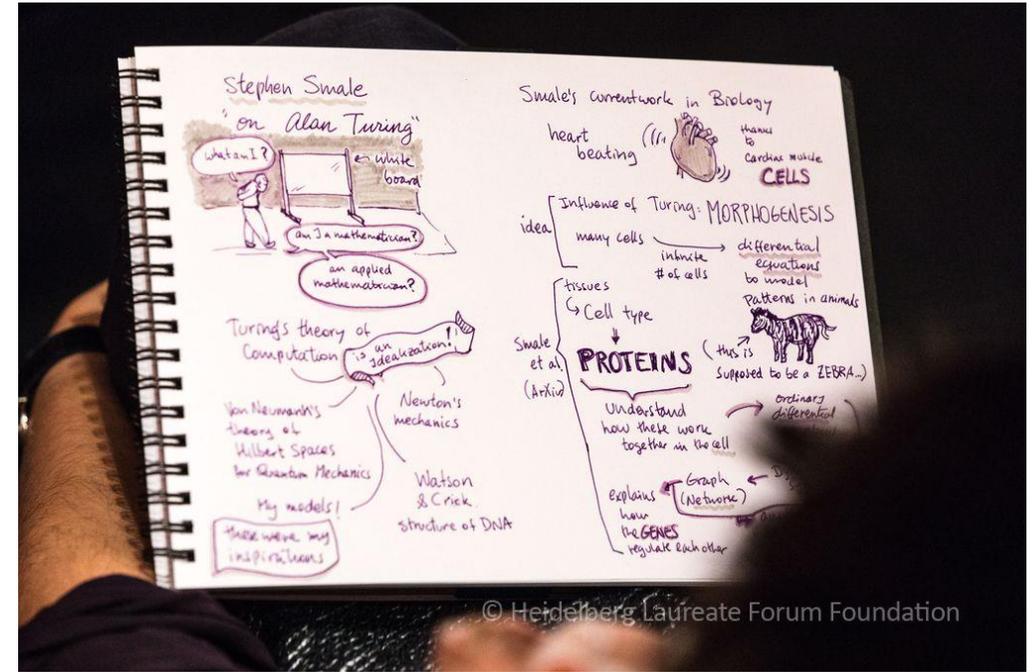


Postdoc  
University of Bonn

Postdoc  
University of Munich



# Graphic recording and sketchnotes



© Heidelberg Laureate Forum Foundation



# Maths + scicomm

Junior-Professor  
University of Düsseldorf

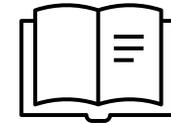


Visits to schools,  
Sketchnoting,  
Social media

**Resear and Teaching (Master)**  
Stochastic Analysis  
Markov Processes  
**Student supervision (MSc, PhD)**

Sketchnoting and  
Graphic recording

Research only



**Reading Seminars**  
**Master / undergrad**  
Analysis/Probability

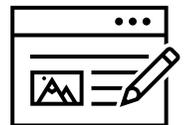


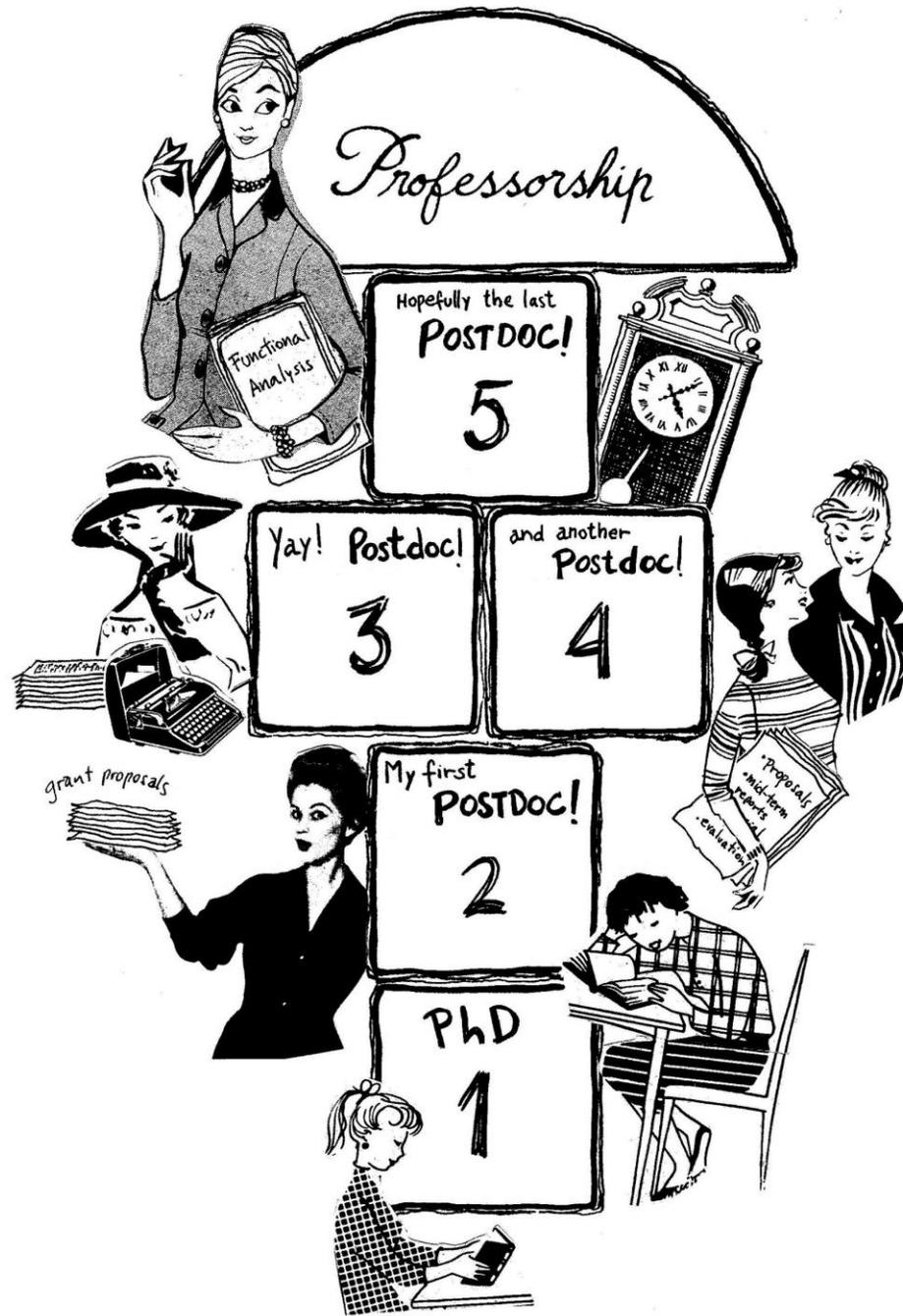
Postdoc  
University of Bonn

Postdoc  
University of Munich

Research only  
**Scicomm)**

Blog The RAGE of the Blackboard  
Women in maths,  
Visualization, writing



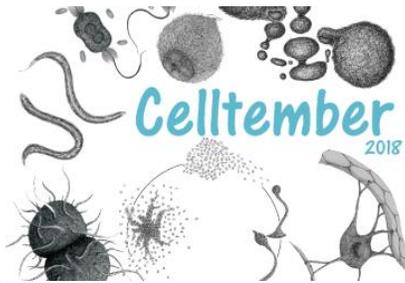
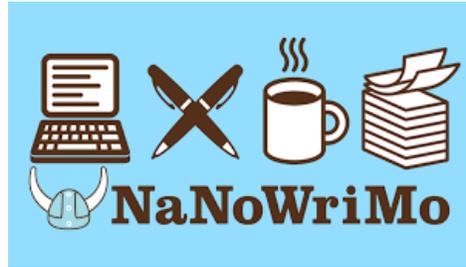






# Sketchnotes and social media

Drawing challenge on social media



@Coni777



@e.a.casanova

Sketchnotes → visualization



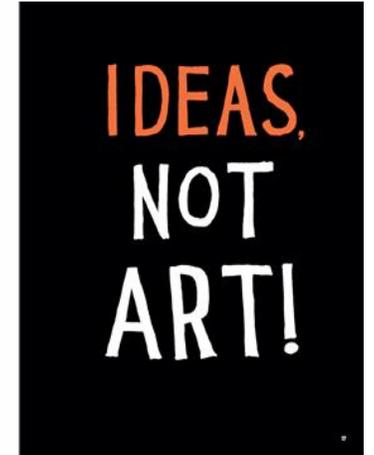
the 5 Basic Elements



EVERYTHING YOU WANT TO DRAW CAN BE CREATED WITH THESE 5 ELEMENTS. Can you identify the 5 basic elements in these simple drawings?



ONCE YOU REALIZE how the objects around you are made from these 5 elements, it becomes easier to draw all sorts of things.



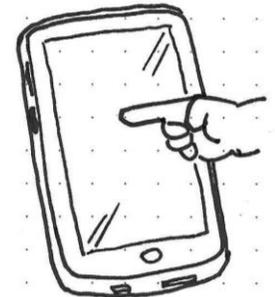
Mike Rohde,  
The Sketchnote Handbook



pencils/  
pens/  
markers



List of  
topics



1. smartphone

# #Noethember (2018)

30 days of sketches on Emmy Noether

With the support of The Aperiodical, UK

#Noethember Day 19

Rings

$(\mathbb{R}, +, \cdot)$

$(a+b)+c = a+(b+c)$

$a+0 = a \quad \forall a \in \mathbb{R}$

$a \cdot b = a \cdot (b \cdot c)$



#Noethember Day 22

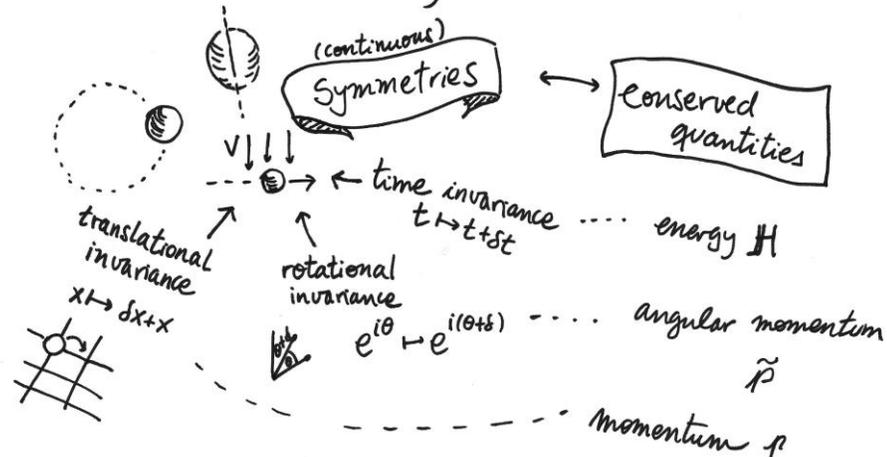
(continuous) Symmetries

conserved quantities

time invariance  $t \mapsto t+st$  ... energy  $H$

rotational invariance  $e^{i\theta} \mapsto e^{i(\theta+\delta)}$  ... angular momentum  $\vec{p}$

translational invariance  $x \mapsto \delta x + x$  ... momentum  $p$



#Noethember Day 23

$A = B$



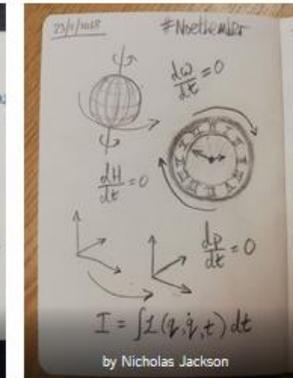
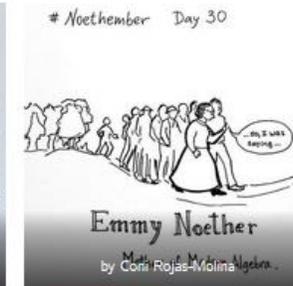
# The Aperiodical

Search

You're reading: Events

## #Noethember: a retrospective

By Katie Steckles and Constanza Rojas-Molina. Posted January 21, 2019 in Events



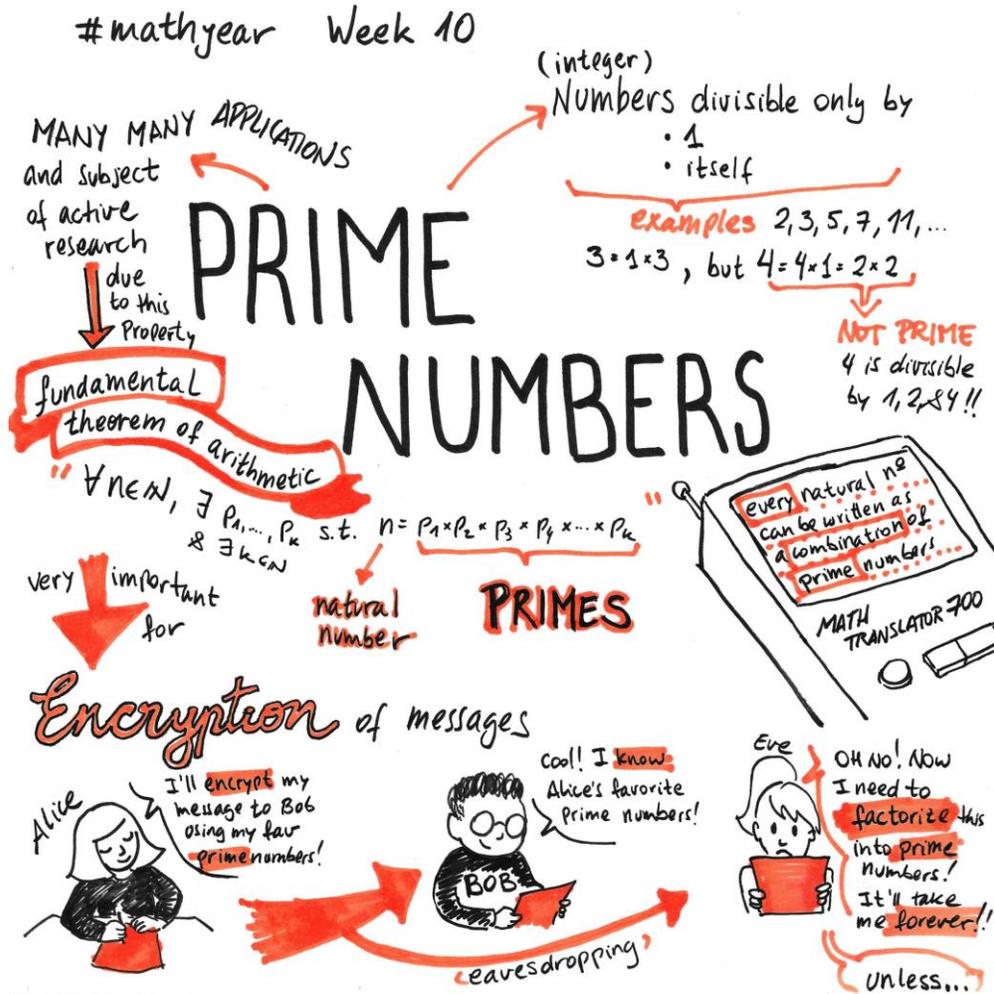
# #Mathyear (2019-- )



52 weeks of maths and its applications



In tandem with  
Marlene Knoche  
@sanguinikDE (DE)



## Lista de temas Abril- Julio

### Abril: las matemáticas como un lenguaje

30.03.-05.04. Noah Chomsky y la jerarquía de Chomsky

06.04.-12.04. Teoría de automatas

13.04.-19.04. Lenguajes de programación

20.04.-26.04. Mi fórmula favorita

### Mayo: las matemáticas y la física

27.04.-03.05. Las matemáticas como un lenguaje para la física

04.05.-10.05. Historia de la física

11.05.-17.05. Mi física o físico favorita

18.05.-24.05. Las 3 leyes de Newton

25.05.-31.05. Mecánica cuántica

### Junio: el arte y las matemáticas

01.06.-07.06. Geometría

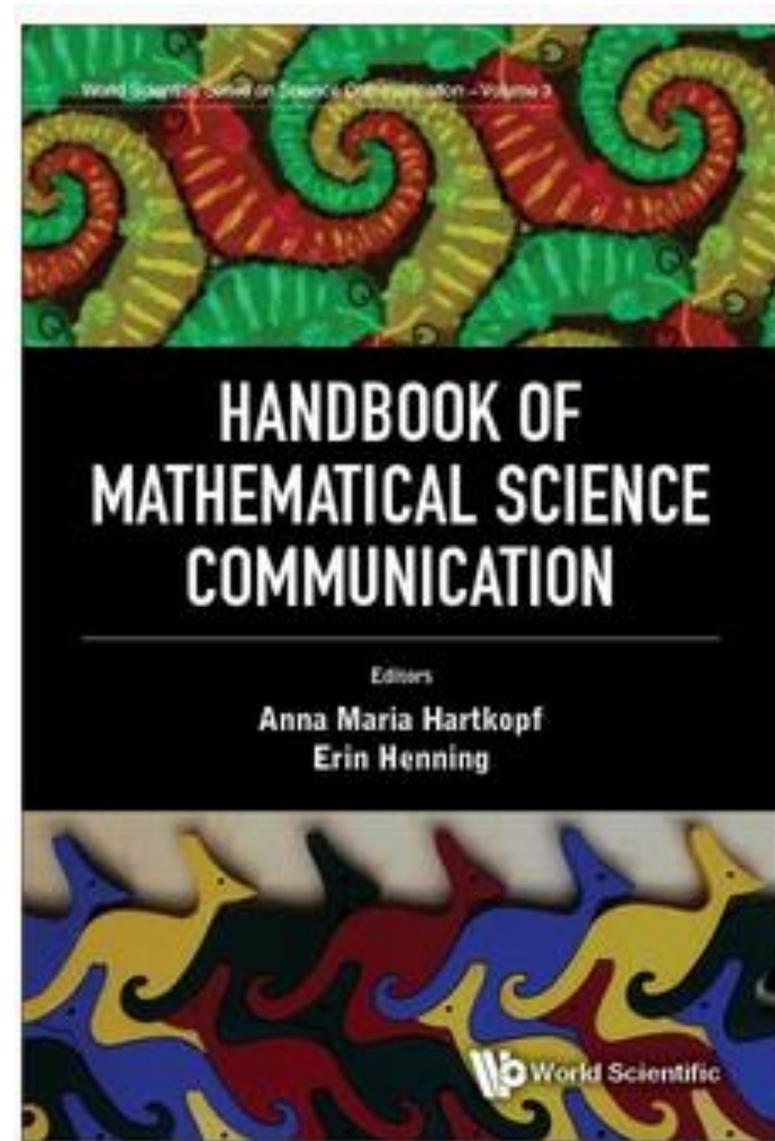
08.06.-14.06. La proporción dorada

15.06.-21.06. Gödel, Escher y Bach

22.06.-28.06. La musica



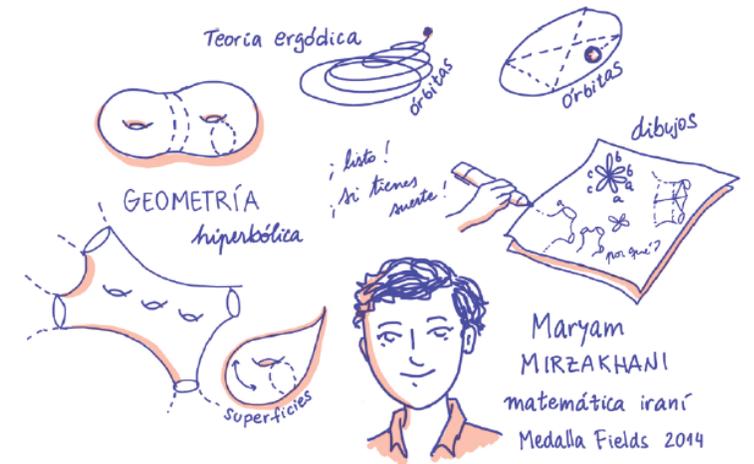
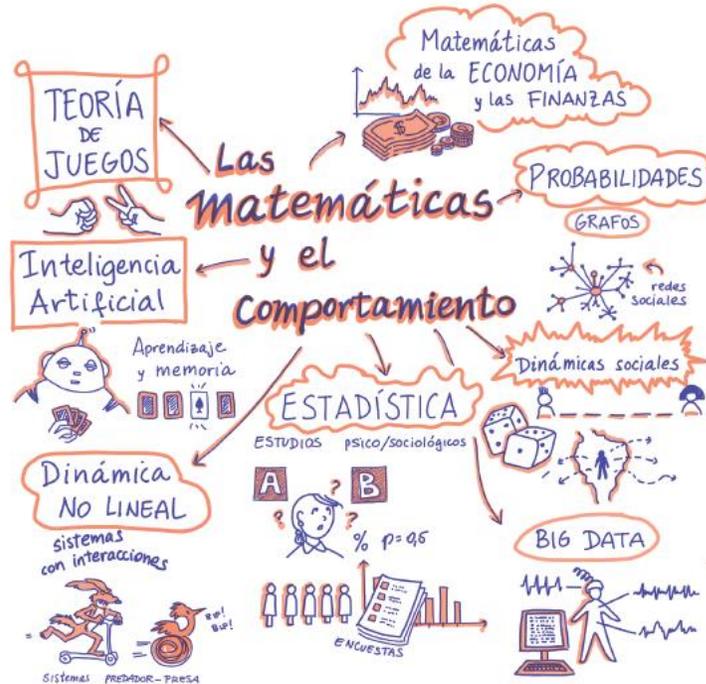
*Visualization and Social Media as Tools for Mathematics Communication: An Account of the Project "Sketchnotes of Science"*  
in Handbook of Mathematical Science Communication  
Ed. Hartkopf, Henning (Berlin), 2023.



# La gran aventura (2023)



Leslie Jiménez Palma

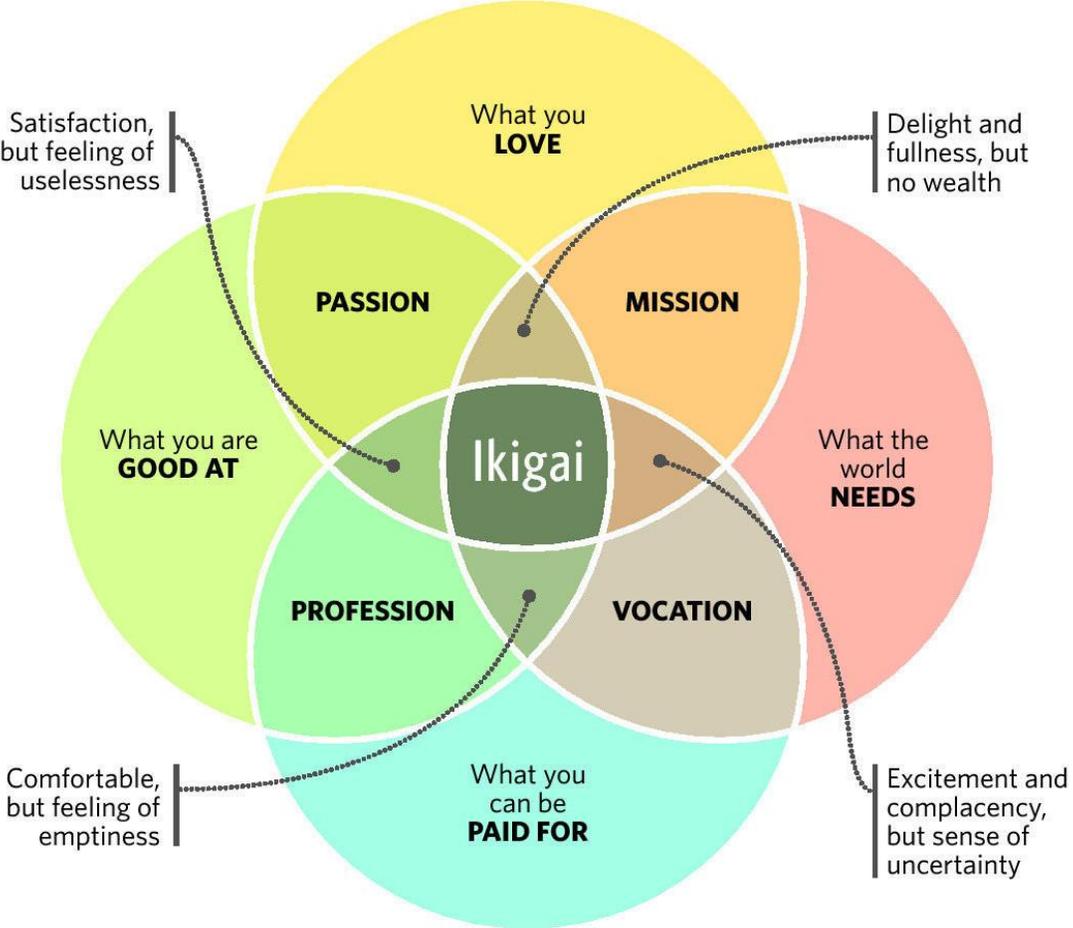


# Back to Ikigai

This picture is DYNAMIC .  
It changes over time!

## Ikigai

A JAPANESE CONCEPT MEANING "A REASON FOR BEING"



SOURCE: dreamstime

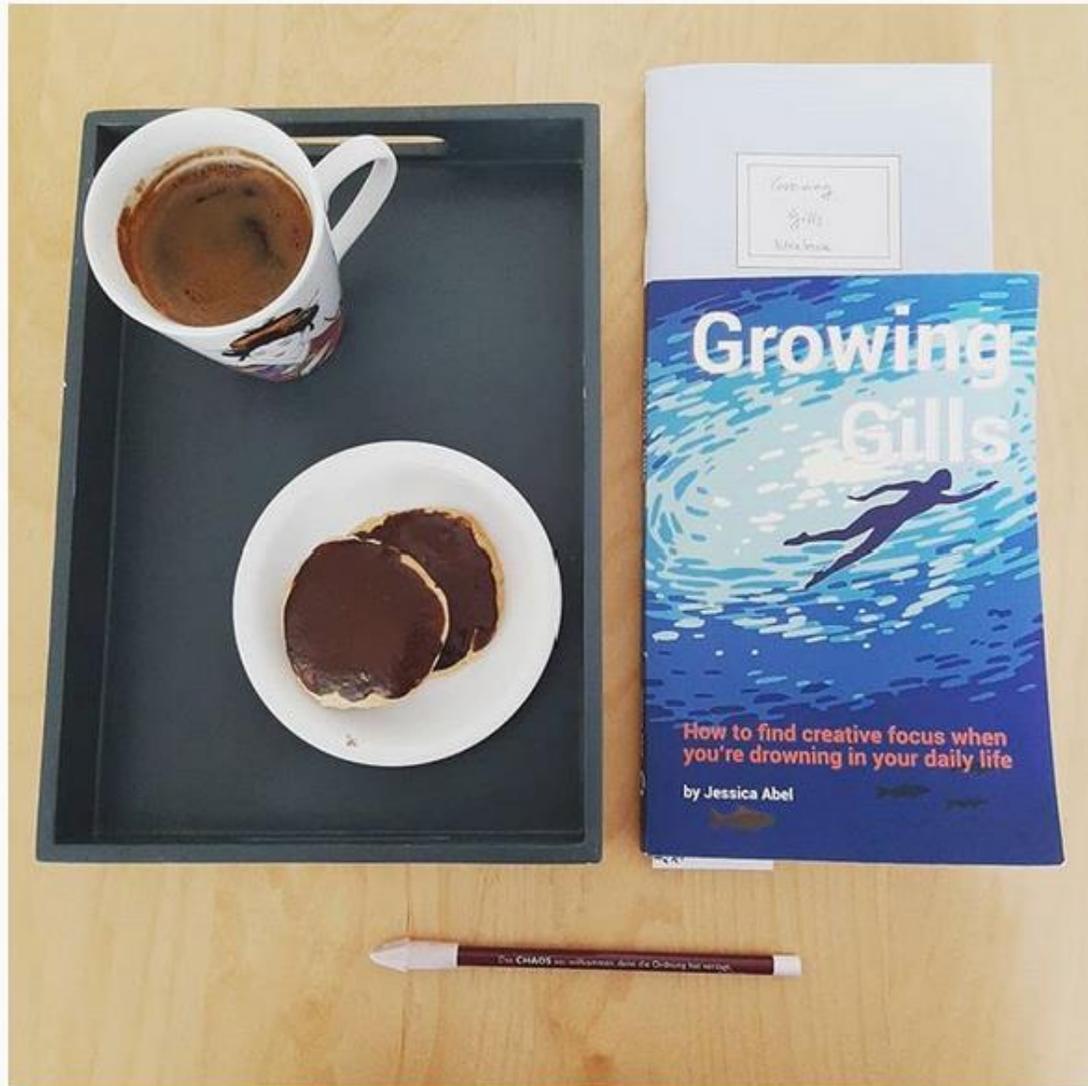
TORONTO STAR GRAPHIC

How does your place in Academia look like?

# Balance



# With training and extra help



The Creative focus Workshop  
Workshop/book by Jessica Abel,  
Cartoonist and author

**Accountability  
Group** -4 members  
(Since 2016)



Courses with  
Marcela Trujillo,  
Cartoonist and author



# And a little help from my friends

And associations!

AWMP,

IAMP,

European Women in Mathematics,

Mujeres en Matematicas en Chile

**Thank you for  
your attention!**

