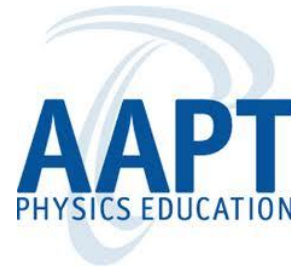




The 4th IUPAP International Conference on Women in Physics



# A Science Adventure of a Girl Who Wanted to Be a Physicist

Marina Milner-Bolotin  
University of British Columbia  
Vancouver, Canada



**NSERC  
CRSNG**

*National Science &  
Engineering Research  
Council of Canada*



*Canadian  
Association of  
Physicists*



*Perimeter Institute for  
Theoretical Physics* 1

# My Grandfather Encouraged Me to Study Physics at a Very Early Age



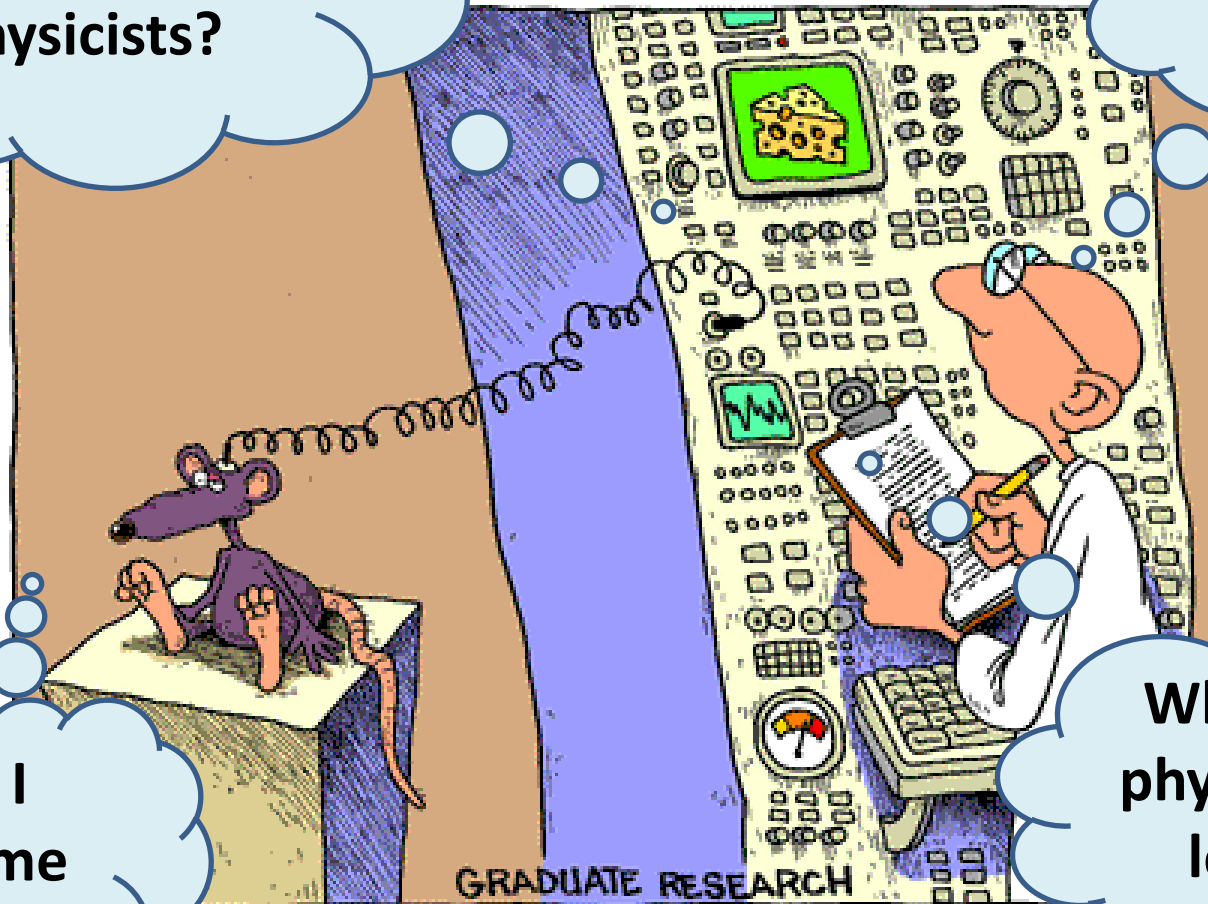
# Questions You Might Have

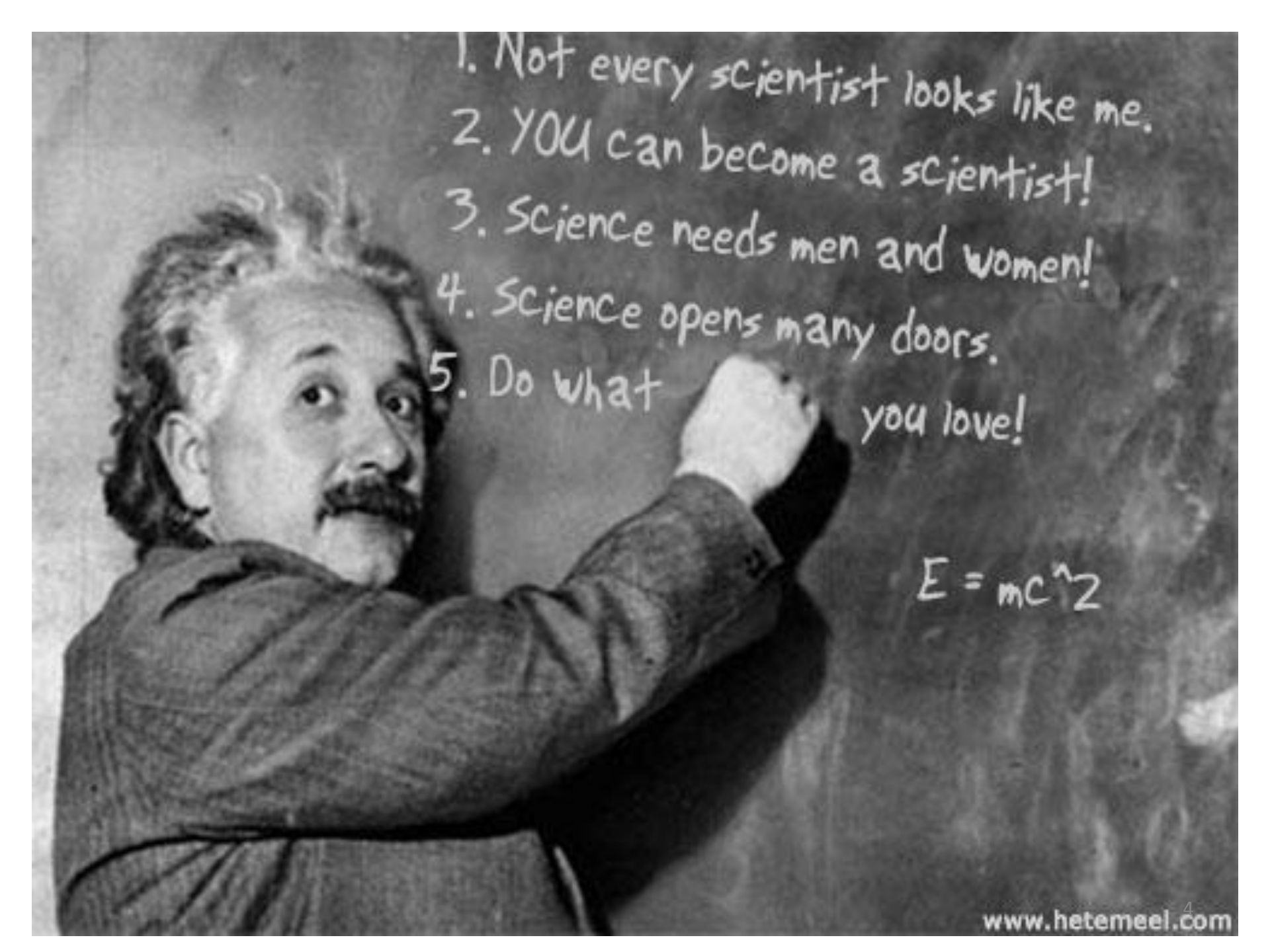
Who are  
physicists?

Do physicists  
make a  
difference?

Can I  
become  
one?

Where can a  
physics carrier  
lead me?



- 
1. Not every scientist looks like me.
  2. YOU can become a scientist!
  3. Science needs men and women!
  4. Science opens many doors.
  5. Do what you love!

$$E = mc^2$$

# Whatever Career you Chose You Must Love What You Do!

$$\text{Working hours over lifetime} = \left(40 \frac{\text{hours}}{\text{week}}\right) \left(50 \frac{\text{weeks}}{\text{year}}\right) (40 \text{ years}) = 80,000 \text{ hours}$$

$$\text{One year} = \left(24 \frac{\text{hours}}{\text{day}}\right) \left(365.25 \frac{\text{days}}{\text{year}}\right) = 8400 \text{ hours!}$$



**Prof. Janis McKenna**  
Physics and Astronomy



**Prof. Elizabeth Croft**  
Applied Science



**Prof. Anne Condon**  
Computer Science<sup>5</sup>

# Why Did I Choose to Study Physics?

- **Curiosity:** want to know how things work
- **Intellectual challenge:** working on interesting problems
- **Exciting collaborations:** working with interesting people all over the world
- **Exciting job opportunities:** industry, business, academe, teaching, government
- **Opportunities to inspire** a new generation and make a difference

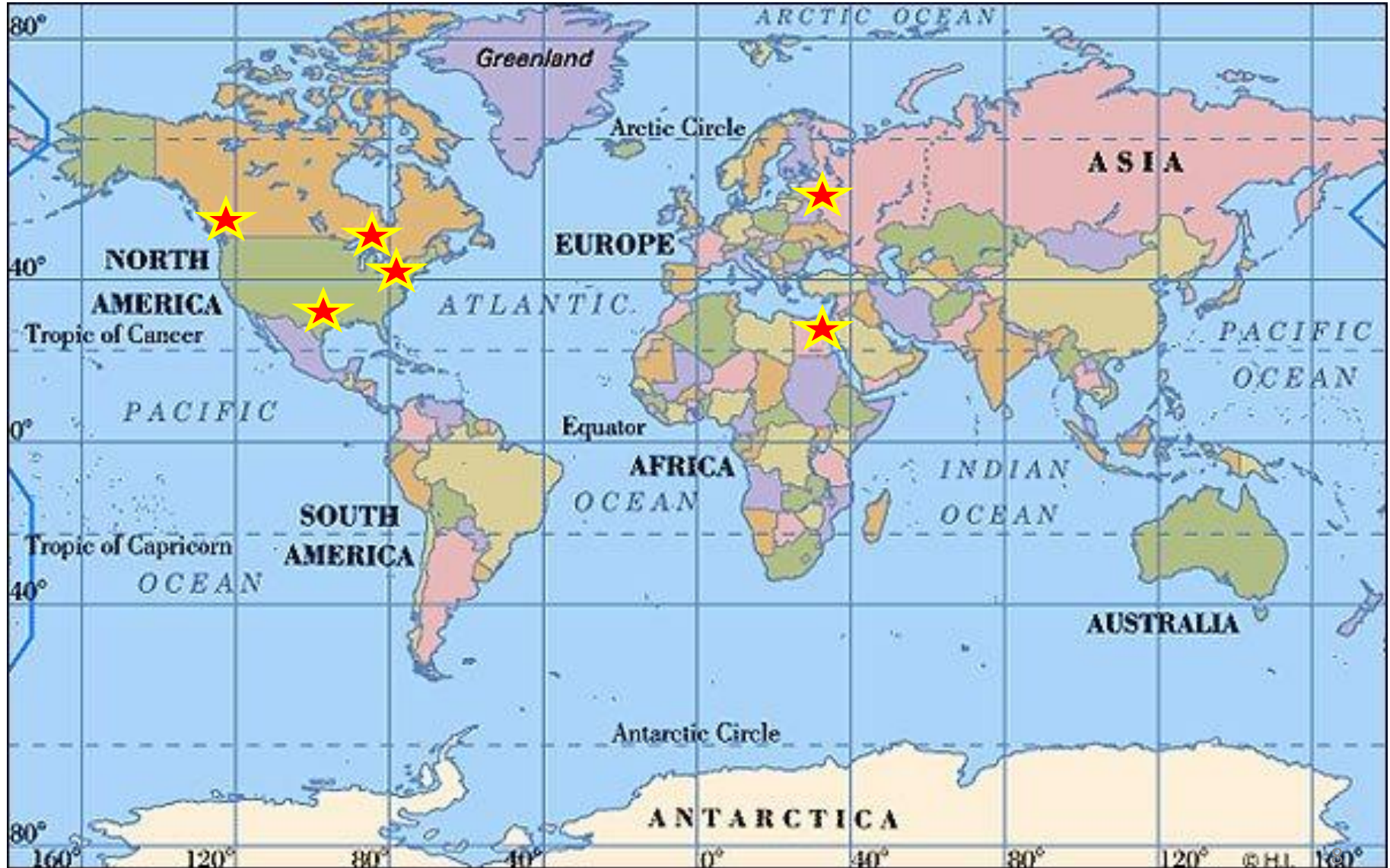
# Where Physics Took Me...

- Geographically
- Intellectually
- Personally



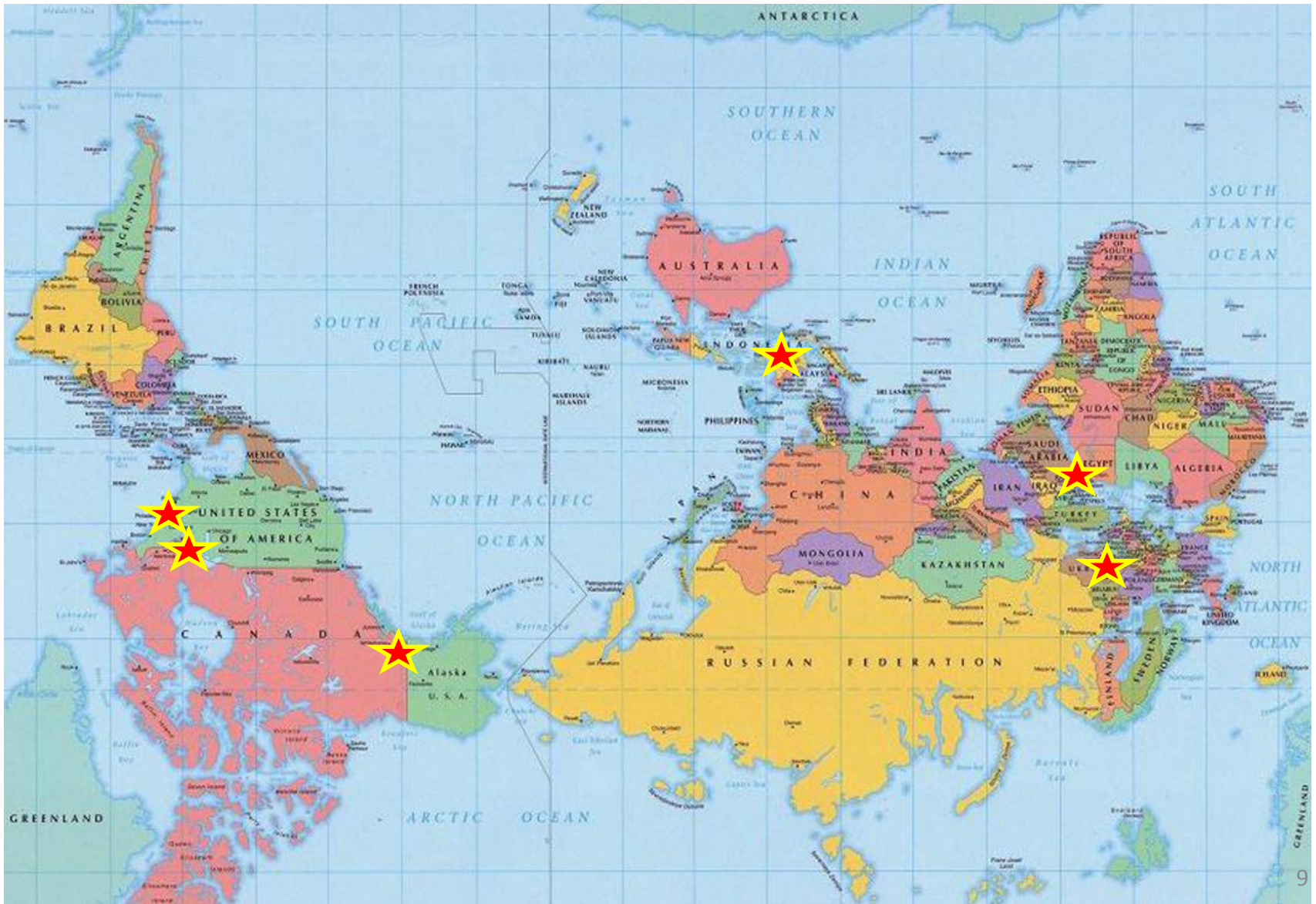
*An elementary school visit*

# Geographically: Northern Hemisphere Version



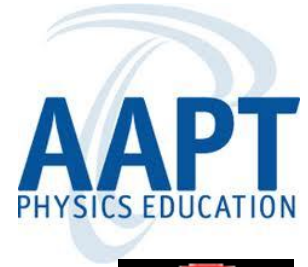


# Geographically: Southern Hemisphere Version





# Intellectually



- Work at major research universities
- Do research in physics education: designing and testing new physics teaching methods
- Do physics and science outreach
- Educate future science and physics teachers
- Actively participate in American Association of Physics Teachers, Canadian Assoc. of Physicists...

# Personally



- I am passionate about my work
- I have a family (my husband is a physicist @ UBC)
- I am financially independent
- I have friends all over the world
- I travel to many places and meet amazing people
- I help other physics teachers and students
- **I feel that I am making a difference...**

# Now It is My Turn to Encourage Others



Where Will Physics Take You?