Women in Colors

SENDY NASCIMENTO - UFAL
POSTDOCTORAL RESEARCHER IN
PHYSICS
1. Who am I?
2. Women in Colors;
3. Mileva Maric;
4. Dr Katherine Johnson;
5. Dr Valerie Thomas;
6. Dr Barbara Carine;
7. My history;
8. My work;
9. Opportunities;
10. Thanks.
WHO AM I?

I love books and music
WHO AM I?

I love books and music

I am apaixonate about learning and study
WHO AM I?

I love books and music

I am apaixonate about learning and study

I love parties and stay alone
WHO
AM
I?

I love books and music

I am apaixonate about learning and study

I love parties and stay alone

I am experimental physics
WHO AM I?

I love books and music
I am apaixonate about learning and study
I love parties and stay alone

I am experimental physics
I am Alice’s mom
WHO AM I?

I love books and music

I am apaixonate about learning and study

I love parties and stay alone

I am experimental physics

I am Alice’s mom

and more...
WOMEN IN COLORS
In 1905, three articles appeared, which began three very important to physics: the theory of Brownian motion, the photon theory of light, and the theory of relativity. The author of these articles—an unknown person at that time was Einstein-Marity (Marity the maiden name of his wife, Mileva). Adapted from Joffe

There are no miracles in science!

My revolted reference to the "Annus Mirabilis Papers" - 1905.
KATHERINE JOHNSON

Her recognition and their other colleagues, black women, was possible due to another great black woman, the author Margot Lee.

- She was a mathematician.
- During her 33-year career at NASA and before works, she earned a reputation for complex manual calculations.
- One of the first African-American women to work as a NASA scientist.
- Johnson’s work included calculating air traffic, trajectories, launch windows, and emergency return paths, creating a one-star observation system, encouraging students to enter the fields of science, technology, engineering, and mathematics (STEM).
• She is a data scientist and inventor;
• She was one of two women majoring in physics (Morgan State University);
• She developed real-time computer data systems to support satellite operations control centers;
• She invented the illusion transmitter (3-D illusions).

Dr Thomas works as a teacher at DuBois High School, developing young people’s interest in science, and helping inspire students under her mentorship; She is a pioneer in computer data systems and image processing, a field (like so many other science fields) that is still dominated by cis white men.
I'm a big fan and I appreciate all the support she provides for young black academics!!

- She is a chemist and philosopher;
- Research on chemistry teaching;
- She promotes science on social media and encourages young black Brazilians to pursue their dreams and rights;
- She is the author of several books, including "Descolonizando Saberes", "História preta das coisas", "Como ser um educador antirracista", among other titles.
MY HISTORY
My (academic) history

1. Chemistry technique 2010
2. Graduate in physics 2016
3. Master's graduate in physics 2018
4. Ph.D. in Physics 2022
5. Postdoctoral Researcher
6. ?
My (academic) history

1. Chemistry technique
2. Graduate in physics
3. Master's graduate in physics
4. Ph.D. in Physics
5. Postdoctoral Researcher
6. I don’t have a favorite!
MY HISTORY

I became pregnant in the first year of my undergraduate studies. I took a break, then returned to continue. I had to navigate life as a solo mother to my daughter, relying solely on a research scholarship, university daycare, assistance from colleagues, and sharing a house with others. While there were times I needed to take breaks, contrary to what many people said, I always returned!

DIFFICULTS

<table>
<thead>
<tr>
<th>Maternity</th>
<th>Financial problems</th>
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<tbody>
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<td>Reconciling the responsibilities of caring for a child and managing study or laboratory work is a challenge. Often, mothers fulfill multiple roles as caregivers, educators, psychologists, nurses, cooks, and more. This multifaceted and demanding workload represents an unjust and often invisible aspect of their efforts.</td>
<td>Taking care of a child involves being responsible for their education, and similar to all aspects of life, it demands time, patience, and MONEY. My daughter, like many other children in this country, experienced a considerable amount of social insecurity due to my financial constraints.</td>
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MY WORK
MATERIALS

Carbon quantum dots
MATERIALS

Carbon quantum dots

Surfactants
MATERIALS

- Carbon quantum dots
- Surfactants
- Metallic nanoparticles
MATERIALS

- Carbon quantum dots
- Surfactants
- Metallic nanoparticles
- Construction and demolition waste
MATERIALS

Carbon quantum dots

Surfactants

Metallic nanoparticles

Construction and demolition waste

Microplastic
MATERIALS

- Carbon quantum dots
- Surfactants
- Metallic nanoparticles
- Construction and demolition waste
- Microplastic

Invite to collaborate
sendymelissa@gmail.com
I study the meeting between light and matter!
Temperature-dependence on the optical properties of chitosan carbon dots in the solid state

An eco-friendly green and facile synthesis of carbon dots from red propolis wax with photoluminescence dependent of reaction time and thermal treatment in solid state
Tuning the photoluminescence by engineering surface states/size of S, N co-doped carbon dots for cellular imaging applications
Figure 6. Cell viability of HTR-8/SVneo cells in the presence of different concentration of as-prepared CDs. (a) 303 K, (b) 453 K.

Figure 7. HTR-8/SVneo cells staining profile. (a) 303 K, (b) 453 K.
Study of the pH effect on the optical and morphological properties of S, N self-doped carbon dots applied as fluorescent anti-counterfeiting ink and pH sensor
Determining the Critical Micelle Concentration of Surfactants by Simple and Fast Titration Method using Carbon Dots

*under revision*
• Latinas in STEM looking for digital media assistant;
• Claredon Fellowship - master and PhD;
• Examination for a professor at the university - open to UEAP, UFCG, UNIFESP, UEFS, UFPA, UFRPE;
• Trainee - JSL Group, Renner, Eletrobras, Leroy Merlin and CBO Group.
THANK YOU

CONTACT ME

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