

# Education, Outreach & Development (EDO)

## *Advanced Ethiopian Women in Physics and Astronomy Focus Group*

By:

Mehbuba Ahmed (on behalf of the group)  
(MSc in astronomy)

Space Science and Geospataila Institute (SSGI), Ethiopia

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# Importance of astronomical outreach and public engagement

## *Why is it important?*

- Educate and inspire the public,
- Promote scientific literacy,
- Cultivate the next generation,
- Demonstrate societal impact,
- Build public support,
- Utilizing Rich Cultural Heritage,
- Linking Astronomy to National Priorities.



# Empowering Ethiopian Female Students Through Astronomy

## Challenges:

- Gender stereotypes and biases that discourage women from pursuing STEM fields.
- Lack of female role models and mentors in physics and astronomy.
- Limited access to high-quality science education and resources, especially in rural areas.



# Empowering Ethiopian Female Students Through Astronomy

## Challenges:

- Logistical barriers: transportation, childcare, timing of events (important for women with family duties).
- Cultural expectations that prioritize domestic and family responsibilities over academic and career pursuits for women.
- Economic barriers: cost of materials, internet access, and device availability for digital resources.



# Empowering Ethiopian Female Students Through Astronomy

## Challenges:

- Language/translation needs: materials in Amharic/other local languages to increase accessibility.
- Safety and cultural considerations for women attending night events, plan mitigations.



# Solution for the challenges that we initiate

- Develop a Proposal to Raise Funds and Conduct Outreach.
- Secure Funding from the APS WiP Group Grant (**\$1000**).
- Create a Collaboration with the Local University.
- Virtual mentorship network.



# Empowering Ethiopian Female Students Through Astronomy

## Goals:

- Inspire and motivate girls and young women to consider pursuing careers in astronomy.
- Provide female students with access to role models mentors, and a supportive community.
- Improve access to high-quality STEM education, resources, and learning opportunities.
- Find out gender stereotypes and biases that discourage women from entering these fields.

# Empowering Ethiopian Female Students Through Astronomy

## Targeted Group:

- Primary and secondary school girls.
- Female university students currently enrolled in STEM programs.
- Women in the early stages of their careers in physics and astronomy.
- Families, communities, and educational institutions that can influence girls' and women's participation in STEM.



# Empowering Ethiopian Female Students Through Astronomy

*outreach programs we have undertaken in this initiatives:*

- Pair female physics students with successful women scientists and engineers as role models and mentors,
- Presentations and panel discussions featuring successful Ethiopian women in STEM fields,
- Provide guidance on academic and career paths.



# Empowering Ethiopian Female Students Through Astronomy

- Emotional support and encouragement,
- Organizing public lectures and stargazing events to engage the broader community,
- Disseminating camp experiences and learnings through local media and social platforms.

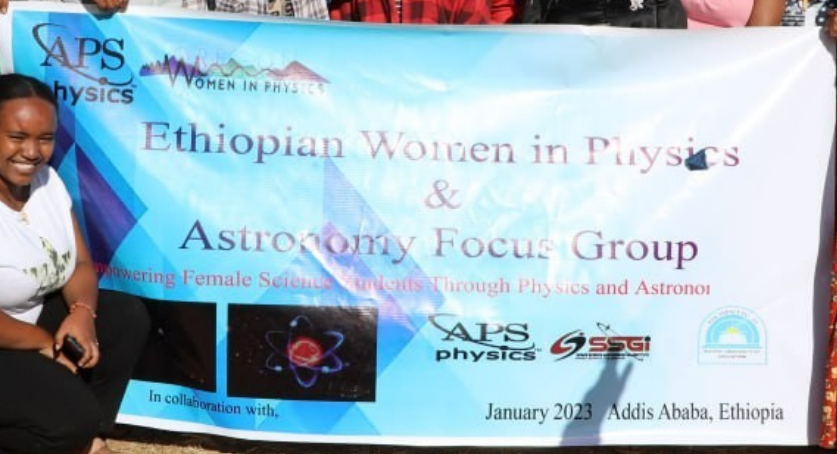


# Sustainable Models for Female Participation in Ethiopian Astronomy

- Digitize outreach: create an interactive platform with tailored resources for female students.
- Develop astronomy apps in partnership with local STEM institutions.
- Strengthen partnerships with international organizations.
- Seek diversified funding from government, NGOs, and private donors supporting women in STEM.

# Sustainable Models for Female Participation in Ethiopian Astronomy

- Foster community engagement through public lectures, workshops, and stargazing events.
- Establish a monitoring & evaluation framework to track impact and adapt programs.
- Build a robust support system for female students to advance inclusion in physics and astronomy.



APS physics WOMEN IN PHYSICS

# Ethiopian Women in Physics & Astronomy Focus Group

Empowering Female Science Students Through Physics and Astronomy



APS physics

SSGI



In collaboration with,

January 2023 Addis Ababa, Ethiopia



Cassiopeia

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**Thank you for your attention!**

**Join us : mentor,  
donate equipment,  
host a workshop,  
or help translate materials**

**[mehbubaahmad5@gmail.com](mailto:mehbubaahmad5@gmail.com)**