

# Making Astronomy Inclusive and Accessible for the Disabilities in Africa

By Nebiyu Suleyman

A disability is a societal imposition on people who have impairments, making it more difficult for people to do certain activities or interact with the world around them. Disabilities are very common in Africa nowadays; 10% of the general African population are having disabilities, but possibly as high as 20% in the poorer regions. The vast majority of Africans with disabilities are excluded from schools and opportunities to work, virtually guaranteeing that they will live out their lives as the poorest of the poor. In addition, School enrollment for the disabled is estimated to be 5%-10%.

The development of astronomy and space science in Africa has grown significantly over the past few years, African countries have recognized the potential of astronomy to contribute to education and creating a better world.

However, individuals with disabilities are under-represented in Astronomy programs and professions. To fulfill this potential, astronomy must be accessible to everyone, regardless of background, learning styles or ability. By becoming more inclusive, the field of astronomy can help ensure that everyone interested has access to information and, technological resources,



## Accessibility

facilitate access to Astronomical resources and careers for people with disabilities in Africa

There are many effective low-tech solutions that can bridge the communication and accessibility gaps. For instance, we have three cases of disability that are common in Africa

1) blind/visually impaired :

a) Astronomy education labs have been lacking resources to accommodate students with visual impairments.

1) Deaf and Hard of Hearing has two main barriers include:

a) limited curricular materials available in Sign many local language

b) Interpreters lack astronomy backgrounds

3) Mobility, sensory, and cognitive impairment

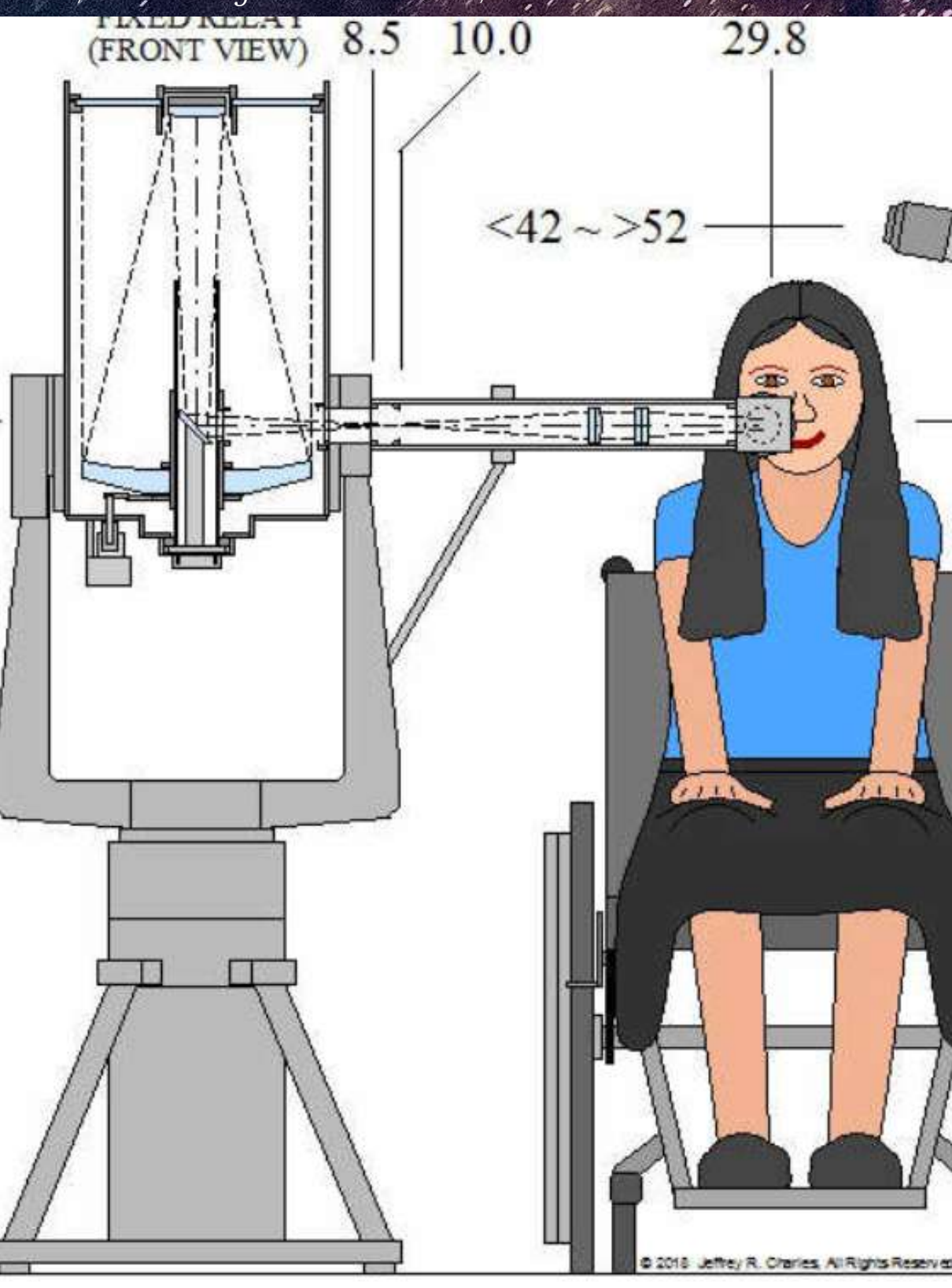
a) High shortage of intelligent power wheelchair

b) Few supporting hands to help them in space outreach events

## Conclusion

We must continue to increase the understanding of factors affecting the under-representation of individuals with disabilities. Individuals with disabilities can be empowered with opportunities to apply their skills in efforts to promote the participation in science, engineering, and mathematics academic programs and careers. We should aim of developing new strategies and resources to promote the access to Astronomy, both at the professional and outreach levels. Implement creative programs to address problems, and share successful practices. The road to inclusion is not an easy one; it involves change of attitudes, change of values, change of teacher training programmes and change of school systems. Most of all, we African need to avoid wars that mainly lead for people to be disabled and resolve our problems peacefully

"My advice to other disabled people would be, concentrate on things your disability doesn't prevent you doing well, and don't regret the things it interferes with. Don't be disabled in spirit, as well as physically," Steven Hawking



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