



# Some Tools for a Blind Physicist

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I do not speak for the blind community.

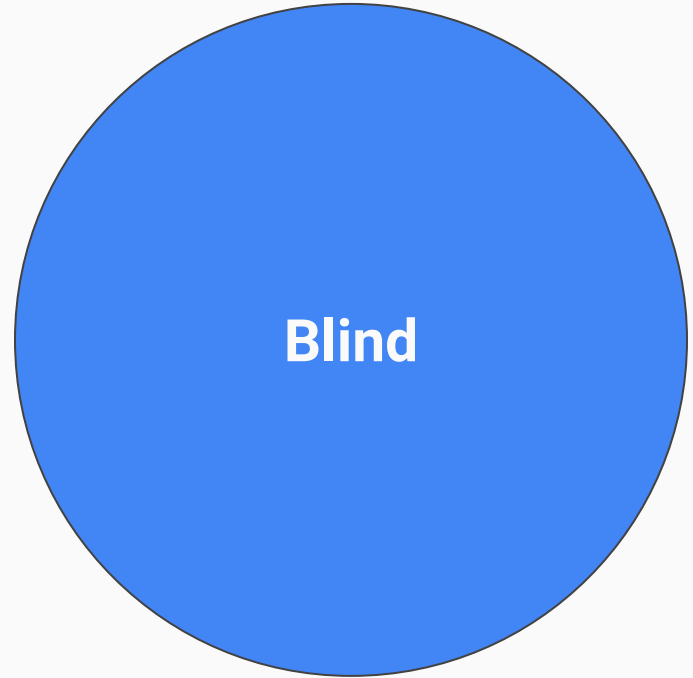
I do not speak for the physics community.

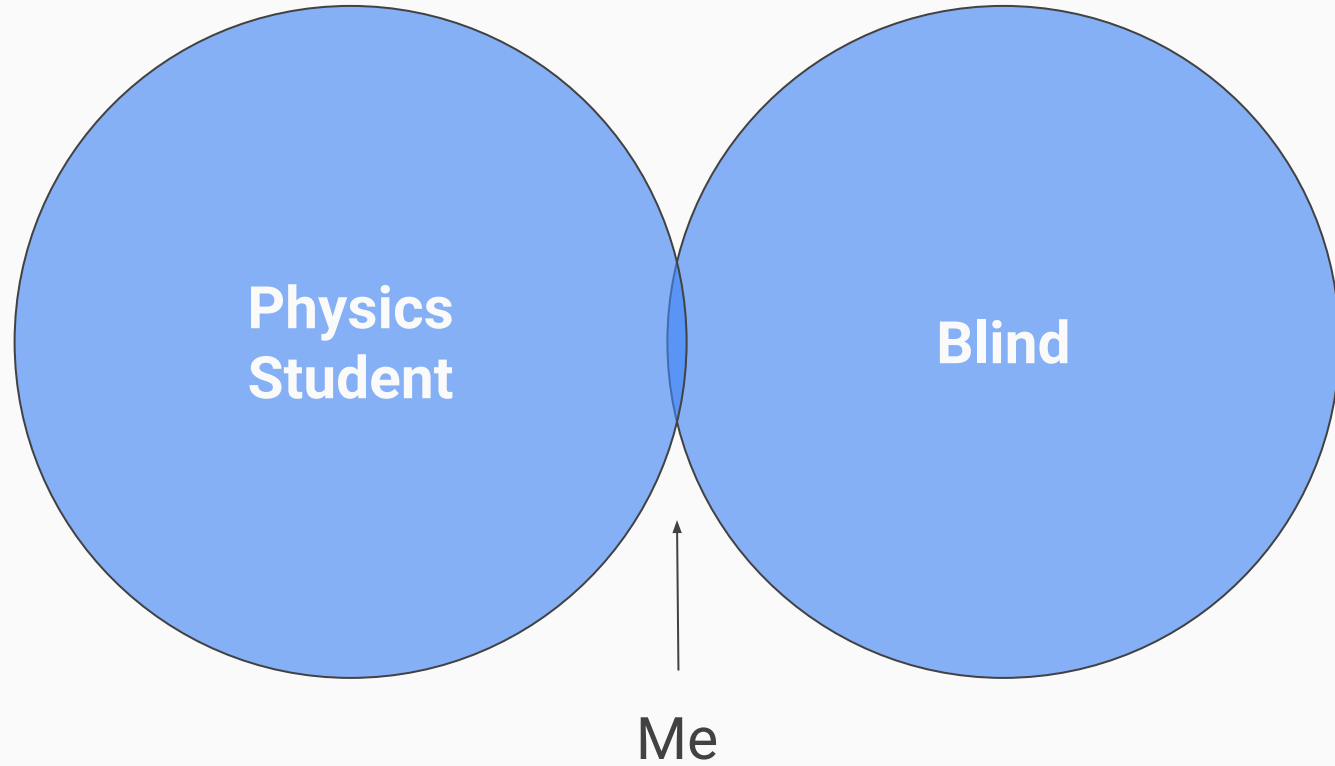
I do not speak for any institution.

All views presented here are my own.

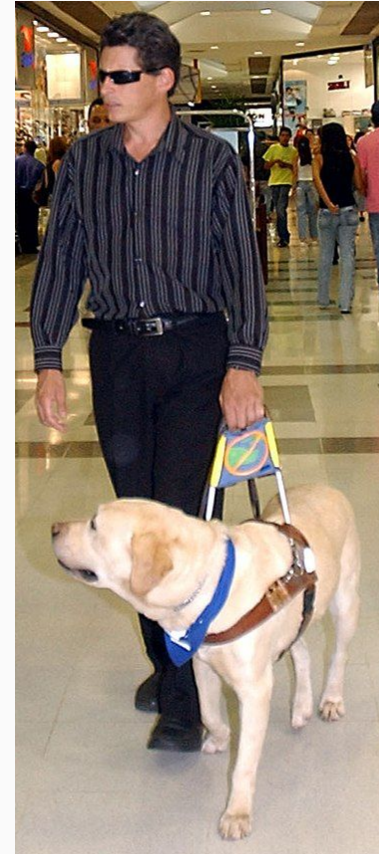
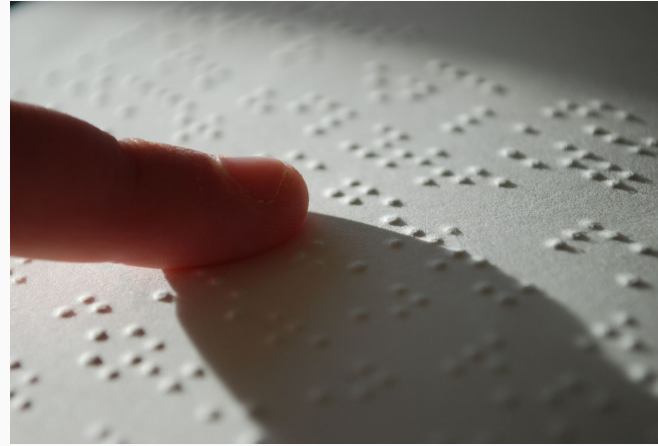


**Physics  
Student**





# Tools for the visually impaired



# Tools for the visually impaired - High tech



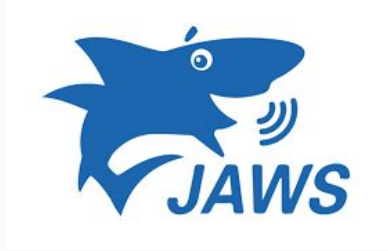
# Consumer tech



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# Screen reader - Computers



Windows



Mac

Linux



Cross-platform



Android

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IOS



X equals minus b plus  
minus square root b  
squared minus four a  
c over two a

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

X equals minus b plus minus square root b squared minus four a c over two a

## Other interpretations

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

$$x = -b \pm \frac{\sqrt{b^2 - 4ac}}{2a}$$

$$x = -b \pm \sqrt{b^2 - \frac{4ac}{2a}}$$

$$x = -b \pm \sqrt{b^2 - \frac{4ac}{2a}}$$

X equals minus b plus minus square root b squared minus four a c over two a

Questions?

# References

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Accessible Version



# Things that are hard

Being a physics student

Being blind

This talk focuses on the intersection of the two

# Tools for the visually impaired

White Cane

Seeing eye dog

Braille

Stylus for Braille

# Tools for the visually impaired high tech

High Contrast Keyboard

Braille Keyboard

Braille reader

Accesible Phone

# Consumer Tech

Noise Cancelling Headphones

iPhone/Android Phone

Mechanical Keyboard

Laptop

# Screen Reader for computer

Windows: Jaws

Windows: NVDA

Mac: Voiceover

Linux: Prca

Terminal: espeakup

# Screen Reader Phones

Android: Google Talkback

iPhone: Voiceover

# Screen Readers For Math

Screen Readers struggle to read math above the calculus level