

UNIVERSITY

Outreach Award - Are you fascinated by the night sky?

SSVI is your chance to win a telescope



Beamline for Schools – Stars Shine For Everyone





Jean-Pierre Grootaerd

11th December 2024





SSVI is your chance to win a telescope

Beamline for Schools – Stars Shine For Everyone



The telescope

Optical tube Messier AR-80/640

- •BRESSER NANO alt/azimuth mount
- •Stainless steel tripod with accessory tray
- •Eyepiece: Super Plössl 26mm
- •Eyepiece: Super Plössl 20mm
- •Eyepiece: Super Plössl 15mm
- •Red dot finder
- •Diagonal mirror 1,25" (31,7mm)
- Aperture solar-filter
- •Smartphone camera adapter
- •Camera-Adapter Ring T2 (M42x0.75mm)





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About the next hour:

Who I am
What am I standing for (past and present)
SSVI: Why and how
My connection with BL4S
How to win a exclusive signed telescope



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Associated member Ghent University Belgium dept. Physics and Astronomy

Associated member IAU
Office For Astronomy Outreach

Workgroup Leader ATM group Public Observatory A. Pien Ghent

- Connection with CERN: Belgian Internship
- Highschool Students 2021
- Beamline for Schools 2022-Present
- CERN Solvay Student Camps 2 and 3 (2024)





Telescope making: before and present



Biggest telescope 420mm main mirror



Smallest telescope 30mm main mirror



SSVI: <u>www.ssvi.be</u> Jean-Pierre Grootaerd

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Telescopes at school













Telescope making: Art...

"steampunk/industrial/gotic Kutter telescope"





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Telescope making at school

"Daphne's Scope" Schoolgirl 14 years old in 2011

Daphne has now graduated as a medical doctor







On national TV in primetime



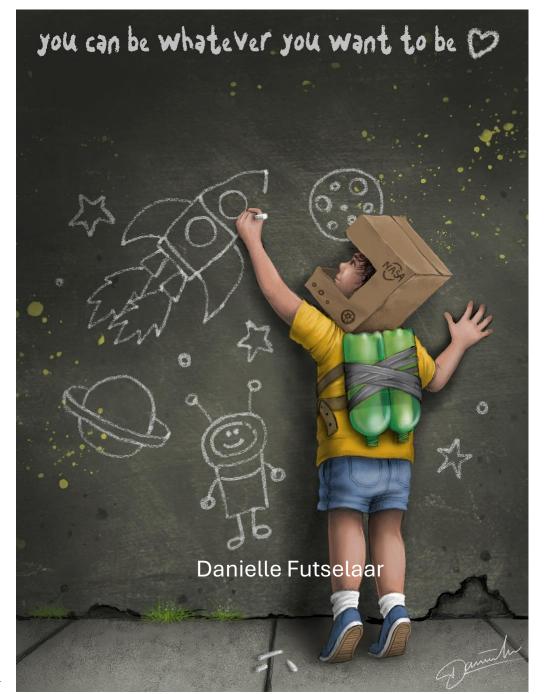


Violetta 10 years: lectures about Black Holes...

Daphne, 17 years, in 2014









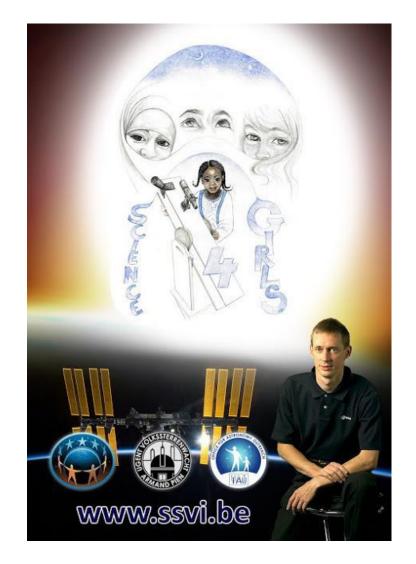
a complicated picture...

The birth of SSVI: autumn 2014

SSVI: www.ssvi.be









Affiches: Martin Dejonghe (NL)

SSVI: www.ssvi.be



Telescopes to underprivileged communities worldwide





SSVI: www.ssvi.be



T4All in Nepal with Sristi KC: BLIND ROCKS







Nigeria: Intern Displaced Persons Refugee camp with Olayinca Fagbemiro







SSVI in Benin







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•SCOPE OF DELIVERY

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first light: photo with smartphone





beamline for schools cern.ch/bl4s

Telescopes BL4S 2024







Jupiter with 4 moons

Telescopes BL4S 2024







Saturn





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François Englert (°1932)

Known for:

Higgs mechanism,
Higgs boson
Spontaneous symmetry breaking

Awards:

Francqui Prize (1982),
Wolf Prize in Physics (2004)
Sakurai Prize (2010)
Nobel Prize in Physics (2013)





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Michel Mayor (l): Swiss astronomer (°1942)

Known for:

Discovered first planet orbiting around a normal star, <u>51 Pegas</u>.

Awards:

Prix Jules Janssen (1998)
Albert Einstein Medal(2004)
Shaw Prize (2005)
Kyoto Prize in Basic Sciences (2015)
Wolf Prize (2017)
Nobel Prize in Physics (2019)





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Didier Queloz(R):Swiss astronomer (°1966)

Known for:

Jacksonian Professor of Natural Philosophy at the <u>University of Cambridge</u> fellow of <u>Trinity College</u>, <u>Cambridge</u>, professor at the <u>University of Geneva</u>.

Together with <u>Michel Mayor</u> in 1995, he discovered <u>51 Pegasi b</u>

Awards:

Wolf Prize in Physics (2017)
Nobel Prize in Physics (2019)





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Samuel C.C.Ting (°1936)

Known for:

Discovery of the <u>J/ψ particle</u>, Founder <u>Alpha Magnetic Spectrometer</u> experiment.

Awards:

Ernest Orlando Lawrence Award (1975)

Nobel Prize for Physics (1976)

Eringen Medal (1977), De Gasperi Award (1988)

Gold Medal for Science from Brescia (1988)

NASA Public Service Medal (2001)



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Gerard 't Hooft prof Physics Netherlands(°1946)

Known for:

Quantum field theory, Quantum gravity,
't Hooft condition, 't Hooft–Polyakov monopole,
't Hooft symbol, 't Hooft loop, Feynman—'t Hooft gauge,
Black hole complementarity,
Minimal subtraction scheme, Holographic principle,
Renormalization of Yang–Mills theory,
Dimensional regularization, Renormalon
1/N expansion

Awards:

Heineman Prize (1979), Wolf Prize (1981)
Lorentz Medal (1986), Spinoza Prize (1995
Franklin Medal (1995), Nobel Prize in Physics (1999)
High Energy and Particle Physics Prize (1999)
Lomonosov Gold Medal (2010)









Education...Education...Education...



Education is the most powerful weapon which you can use to change the world. Let there be work, bread, water and salt for all. No one is born hating another person because of the colour of his skin, or his background, or his religion. (Nelson Mandela)













Education...Education...Education...











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SSVI-BL4S Outreach Proposal Prizes

You can win one of those 15 special telescopes

- Organise a science education or outreach activity in your community.
- **Inclusiveness** should be a very important component of this activity.
- Share your passion for science with people that are less exposed to science.
- Think of a **creative way to introduce physics** to children coming from a **disadvantaged** area in your region.
- **Describe** this science education or outreach activity that the members of your team have already organised or will organise in a section of your written proposal (**up to 200 words for your outreach proposal**; in addition to the 1000-words limit of your BL4S experiment proposal).
- And remember: The telescopes are extremely special with these signatures....

Website: https://beamline-for-schools.web.cern.ch/outreach-award-do-you-enjoy-observing-night-sky