



Science and culture

Evaluation of "Holland in the Universe" IYA 2009
Concise version
For Halland's Education Association, Sweden
Charlotte Sikö Helin
January 2010.

Preface

**Concise version in English. For the complete version, please contact
info@hbf.se**

This report is addressed to Region Halland but will also be sent to the organizers, participants and other interested institutions and individuals announced. For that reason it has comparatively broad scope and illustrated accordingly. The images are for internal use only and may not be disseminated/published in accordance with applicable laws. The originals, press clippings, brochure material etc. are archived in the Folkrorelsernas archives, Southern Halland, Sweden

Eftra, 29 January 2010

Charlotte Sikö Helin
Project Manager

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Background

The International Year of Astronomy, IYA 2009, was proclaimed by UNESCO four centuries after Galileo Galilei, in 1609 and with immense impact, developed the telescope. In Sweden, a national centre was set up by professional astronomers. We saw a promising opportunity to start an exhibition in Halland, and continue the work we started in 2007 developing in popular science and research information in the region. Immediate cooperation partners were the County Museum of Halland and the University of Halmstad, and later also "Music in Halland". The Educational Association of Halland accepted project responsibility with initial economic support from "Region Halland" and the Swedish Astronomical Association. IYA2009 received worldwide public attention; here, our regional effort was named "Halland in the Universe", with many events both within the county of Halland and beyond.

"Halland in the Universe"

Many factors influence the outcome of an arrangement: marketing, time, place, season/weather, cooperation, personal devotion, media interest, etc. A good choice of title might sometimes compensate for a lack of well-known names.

This kind of activity is not as common in Sweden as in many other countries. For instance we have the *Science Festival* (Gothenburg), *Researchers' Friday* (all over the country) and Science Cafés (Gothenburg and Halland). In Europe, there is the *Café Scientifique*, originating in France, where the warmer climate makes outdoor discussions natural. In Denmark, Copenhagen and Aarhus have Cafés and England also has a long traditions of similar activities.

From an international view, the population of Sweden is small and the cities few. But people are, we imagine, the same irrespective of culture, i.e. curious, concerned about some things, pondering over others, interested in learning things and do not mind having a bit of fun. It has been said more than once that science is global and important to everybody because no one can avoid it. Of course, not everyone can understand everything, but simplifying the information in order to make it understood still would not be the right thing to do. Experience nevertheless shows that it is always possible to open up windows to discoveries and knowledge depending on the character and abilities of each individual (or at least most individuals...). This requires a variety means and methods so as to combine appeals to the intellect and our senses.

Scope and methods

The events during the International Year of Astronomy in Halland were 70 in total, plus one in Lund, one on the island of Hven and five in Gothenburg; 78 events in streets and in markets, libraries, cafés, castles, schools, museums, at conferences, festivals and in different organisations. All the municipalities of the county were represented and in all municipal authorities we found people who are positive towards development of regional communication of science/culture.

The starting point of very arrangement has been the insight that science and culture are two sides of the same coin. Combinations of personal enthusiasm, objects and /or experiments, an image/and/or sound have all given us reliable ways to reach most people. It has worked very well, too, when opportunities to conversation and

interaction in general were given. Target groups have been the general public, but also young people, families and organisations.

Each occasion had its own character depending on environment and context; the response of the audience has been positive throughout. All the events are accounted for here; they have had the form of *seminars*, *panel discussions*, *activities in schools and during school vacations*, *science cafés*, *science concerts*, “*street science*”, and *lectures with music*. All of this with the aim of attracting an audience unaccustomed to activities like these yet without losing confidence or falling into the trap of lightweight information.

Number of Organizers and sponsors in the county of Halland: 34

Number of those taking part e.g. scientists, teachers, communicators etc : 68

The three travelling exhibitions

”Stars up the walls”

A beautiful exhibition about the corresponding celestial motives in the Nebra disc from 3.600 B.C and a tapestry, painted during the late 18th century in a remote part of southern Sweden. It also contains the Bayeux tapestry with the comet Halley and other events with impacts on visual folklore.



“The white nights”

The exhibition tells about the explosion over Tunguska in 1908 showing unique original photographs taken by a sleepless man in Halland. Real meteorites and a wooden sample from the place in Siberia are other interesting objects included in the exhibition.

”Discover the Universe”

This exhibition was produced in cooperation with Professor Gosta Gahm at the Stockholm university and member of the Swedish node of IYA 2009.

The exhibition describes the achievements of Galileo Galilei and other giants of science, plus a brief history of astronomy. It also contains interactive models and dioramas.



Caroline Herschel (1750-1848)



Who swings the fastest.....?



The technical development from Galileo Galilei in 1609, via the camera to the huge ESO Very Large Telescope (VLT) in Chile

Venues: "Stars upon the walls" and "The white nights"

*The Museum of Drawings, Laholm,
Hylte Library, The Tapestry Museum i Unnaryd
County Museum, Halmstad, City Library Halmstad, Halmstad Bookshop,
Andersbergs Library, Getinge Library.
Falkenbergs Library
Naturum, Getterön
Fyren in Kungsbacka*

Venues: "Discover the universe"

*County Museum, Halmstad
Museum of Natural History, Göteborg.
Science Centre Balathazar, Skövde
AlbaNova University Center, Stockholm
Observatory Museum, Stockholm
Uppsala City Library, Uppsala
Naturum Dalarna, Siljansnäs
Museum of the Future, Borlänge
Science Center Umevatoriet, Umeå
The House of Technology, Luleå
Kiruna City Hall
Abisko Tourist Station*

Street Science

11 events in 8 different places

"Can you see the star?"

Observations with introductory lecture and discussions. All visitors get a star map and we show some of the magnificent images taken by the big telescopes.

Andersbergs library 4 Feb, Getinge library 18 Feb, Wilderness Highschool Unnaryd 12 Mar, Museum of Drawings, Laholm 1 Oct, Tjolöholms Castle 7 Oct, Naturum Varberg 11 Oct

Waiting for the sky to
darken...



"A radiant day"

Experiments and demonstrations for the whole family about all kinds of electromagnetic radiation. You can test your mobile phone, look at beautiful things in UV, listen to the voice of matter, send long wave messages etc. Is all radiation dangerous? Did you know that radioactivity is going on in our bodies? We provide facts, you decide what to believe.

Laholm 1 March, Tjolöholm 10 May, Halmstad 30 May, Hylte 6 June and Falkenberg 27 June.



UV-radiation in Tjolöholm



Measuring cell radiation in Falkenberg



Electric health care anno 1932 in Laholm

Science Cafés

16 different topics on 26 different occasions

"The man in the cave, his compass and his calendar" About archeoastronomy.

Johan Dahnberg County Museum in Halmstad

"Dark matter ,infinite galaxies and incredible beauty"

Dr Cathy Horellou, Onsala Space Observatory, Chalmers

"About a very stupid thief or how the Nebra disc was discovered" Arne Sikö, University College of Halmstad

"Pat an alien " About meteorites and things to come

Arne Sikö University College of Halmstad

And Charlotte Helin/"Halland i Universum"

"Are there birds on other planets?" About astrobiology

Michael Lindqvist, Onsala Rymdobservatorium.

"The lunatic from the tropics " About astronomy in our everyday language. Torbjörn Jansson, University College of Halmstad

"Stars up the wall" Anna Holmström, County Museum of Halmstad, Charlotte Helin/"Halland i Universum"

"The peasant, the ship and the Pleiades" Extraordinary connections with the stars in focus

Arne Sikö, Anna Holmström, Charlotte S Helin

" She was an astronomer" e.g Henrietta Leavitt, Caroline Herschel, Frida Palmér. Charlotte S Helin

" The odd teacher" and "Halmstads greatest celebrity"

About the first female astronomer in Sweden and the man behind the Rydberg Constant . Charlotte S. Helin/"Halland in Universe"

"What was the star of Bethlehem?"

Master of Engineering, author and teacher Arne Sikö

"The story of Caroline Herschel" Charlotte S Helin/"Halland i Universe"

" The Scout and Sirius" How to find your way back home
Hans.Erik Eldemark, University College of Halmstad



Cathy Horellou



Does a meteorite smell?



Frida Palmér

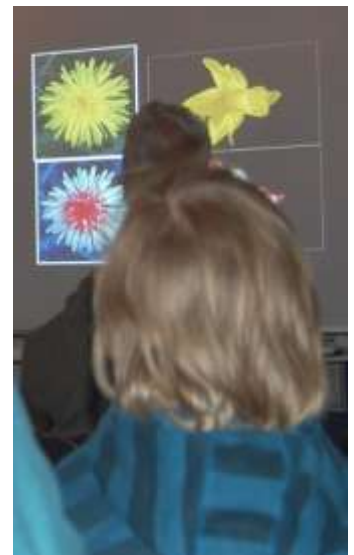
"Harmonicus Mundi" Music
created from the notations of Kepler
SAL:s trio: Ann-Louise Liljedahl,
Leif Isebring and Stefan Isebring
.Introduction: Charlotte S Helin



"The Sky as a calendar" Arne Sikö, C. S
Helin



***"With an eye for other
wavelengths"***
Göran Sahlén, University of
Halmstad



Lectures in musical context and Science concerts **4 productions and 11 performances**

Multidisciplinary, cross-over, innovative and fun. Who says that science communication can't be serious and fun at the same time....?

Lectures in musical context

"The comet and the lunatic"

Lecture about the influence of the Sky in our common language. Torbjörn Jansson, award-winning teacher at the University College in Halmstad and the string quartet Ginestra, musicians in residence .



*11 March Immanuel Church Halmstad
and 31 March Tvååker library*



"The one-eyed pirate"

About astro navigation . Master of Engineering Arne Sikö, author and award-winning teacher at the University College in Halmstad and the string quartet Ginestra, musicians in residence .

29 March Tjolöholm Castle and 15 April, Hylte Library

Science concerts

"Twinkle twinkle little star...."

A character from each century discusses with the astronomer about what he/she had seen in the sky at a particular time. Music, astronomical images, demonstrations and stories make up this performance about history of astronomy from multidisciplinary point of views. Aristachos, Kepler, Galileo, Newton, Sir William and Caroline Herschel, Sir Humphry Davy and Mary Somerville all figure in quite unexpected ways...

Halmstads Chamber Choir , conductor Hans Johansson and among others Arne Sikö. , *The Church of all saints, Lund 7/2, the Tycho Brahe Museum, Hven 29/8.*



"The Starry castle"

An entertaining history of science with Ginestra, (Peter Skogh violin I, Michael Nielsen, violin II, Jan Svensson, viola, Charlotte Hedin, cello), the linguist Torbjörn Jansson, the bold physicist Arne Sikö and the babbling Charlotte S Helin
26 Aug, Halmstad Castle



Special events

With no doubt, the two main challenges were *"Universe on-line"* 3/4 and *"Your place in the Galaxy"* 10/9 . Both were arranged in Halmstad, but with many visitors from other parts of the region.

"Universe on-line" ("Around the world in 80 telescopes")

Broadcasting with great expectations and to many control rooms.... The big success of the evening was an improvised transmission from the Swedish Solar Observatory at La Palma. Technician in charge Daniel Tornell, Gethinge made it all work and saved the whole event.



On screen, astronomer Mats Löfdahl at La Palma

"Your place in the Galaxy- an evening about conceptions of the world"

A panel with the astronomer Cathy Horellou, archbishop emeritus KG Hammar, chief physician Göran Magyar and the historian of ideas Jonas Hansson attracted a huge audience. Many considered this occasion the highlight of the IYA 2009 and it also became an indicator of what ordinary people find most important. Most surprising was the composition of the public. One half came from high schools and the other half were about 40-50 years old. The youngsters with questions revealing that they have not yet started with real life, as it were, and the others, grown up, experienced but still thinking about Life and Death...



Total attention among the students



Göran Magyar, Jonas Hansson, Cathy Horellou



Din plats i galaxen

”Världsbildande kväll”

Vad händer med oss när den första signalen kommer från en annan
jordliknande planet? Hur mycket styrs vår världsbild av våra hjärnor?
Vad gör vi om Apophis träffar oss år 2036?
Lyssna på och ställ dina frågor panelen!

Cathy Horellou, bitr. prof. i astrofysik, Onsala
K6. Hammar, ärkebiskop, Sverige
Göran Magyar, chefläkare, Halmstad
Jonas Hansson, Idé- och lärdoms historia, Lund
Moderator: Kathinka Linde.

Immanuelkyrkan tors 10 sep kl 19. Fri entré

Arr: Hallands biskopsstift, Östsvenska kyrkan,
Hörsölan, Halmstad



Other ventures Radiating Library



An intense afternoon at the city library in Göteborg
(26/10)



Beautiful things in UV require darkness

The first female astronomer in Sweden

Her name was Frida Palmér and she ended up as a teacher in Halmstad. Held in the highest esteem, she was asked if she could give her patronage to a local branch of Zonta, the international network of women professionals. This branch had its 90th anniversary in 2009 and celebrated with a seminar about gender in science



90-års jubileum den 8 november, 2009

"Rymdålderns genusperspektiv"

Charlotte Sikö Helin, projektledare, "Halland i Universum 2009"
Margareta Bohlin, fil.lic. genusvetenskap, Högskolan Väst
Angelica Persson, VD, Märta Måås-Fjetterström AB, 90 år
Annica Dahlström, prof. histologi/neurobiologi, Gbg Universitet

Klara Salen, Halmstad Bibliotek

Söndagen den 8 november kl 1230-1600

Arrangörer: Bjäre & Halmstad Zontaklubbar, i samarbete med

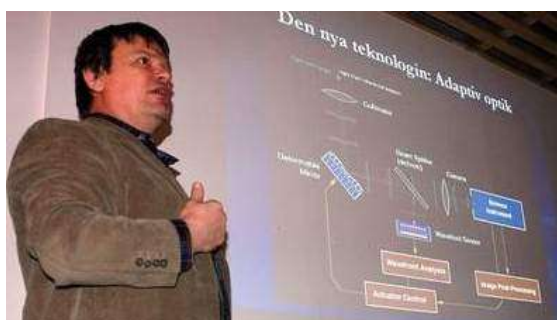
School activities

29-29 october, County Museum of Halmstad:
Treasure hunt with compass, Make your own
tube, star maps, Build an fire rockets and the
highlight: soft
drink bottle-
rockets on the
lawn!

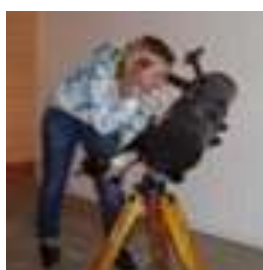


2 March, Osbeck highschool in cooperation with the Museum of Drawings Laholm

Astronomer Peter Linde, University of Lund (also chairman of the Tycho Brahe Astronomical Society which can offer school classrooms remote control of the telescopes owned by the society) and Carina Persson, Onsala Space Observatory.



Peter



24 March, Wilderness Highschool, Unnaryd. Astronomy with stargazing.

22 October Kattegatt Highschool , Halmstad

11 November, Katrinebergs School for Adult Learning, Vessigebo



Media
Great coverage!

Carina



Roll-ups

Very useful, not expensive, easy to handle and strongly recommended!



I Göteborg to the left,
Göteborg to the right.



Behind the County
Governor



Behind a lecturer



