

Curriculum Vitae
for
Kaspar Kirstein Nielsen

November 2, 2008

1 Personal information

Name: Kaspar Kirstein Nielsen

Date of birth: 1st of April, 1983

Address at the institute:

Risø National Laboratory for Sustainable Energy

Frederiksborgvej 399

4000 Roskilde

Neutronhouse, 232

Address at home:

Gerbrandsvej 26 2 2

2300 Copenhagen S

Phone: +45 40 92 58 66

Email: kaspar.kirstein.nielsen@risoe.dk

2 Curriculum

2.1 Education

- 2005— : Ph.D student at Danish Technical University Department of Mechanical Engineering
- 2005—2007: Master of Science student at the Computational Astrophysics research group, The Niels Bohr Institute, Copenhagen University (final Danish average grade 13).
- 2002—2005: Bachelor of Science student (in Physics and Astronomy) at the Niels Bohr Institute, Copenhagen University (final Danish average grade 9.7).
- 1999—2002: Mathematical student, Haslev Gymnasium (final Danish average grade 10.1).

2.2 Reports / theses

- 2007: Master of Science thesis “Numerical MHD-modelling of Planetary Nebulae” (Danish grade 13)
- 2005: Bachelor of Science thesis “The Jovian Moon Europa’s Magnetic Field” (Danish grade 11).
- 2003: 1st year project “The Sun’s Differential Rotation” (Danish grade 13).

2.3 Public outreach

- 2006: Conducted a high school teaching programme in close collaboration with Associate Professor Knud Jepsen, Haslev Gymnasium (Denmark). The motivation was to teach astronomy to 2nd and 3rd year students from high school. The project went very well and the exercise listed just below was used with great success.
- 2006: Scientifically responsible for the content and development of the high school astronomy exercise “The Distance to M100 as Determined by Photometry of Cepheid variable stars using the EU-HOU SalsaJ Software”
<http://www.astroex.org/english/exercise7/>
- 2006: Co-author on the article “The ESA/ESO/NASA Photoshop FITS Liberator version 2” in the conference proceedings “Communicating Astronomy with the public 2005”.
- 2005: Co-author on the article “Europas saltvandsoccean” in the Danish public outreach journal for astronomy “Aktuel Astronomi”, autumn issue 2005.

2.4 Work experience

- 2004—2007 : Technical responsible for the webpages of IMAX Tycho Brahe Planetarium (<http://www.tycho.dk>).
- 2002— : Software developer as a member of the Advanced Projects Development Team at ESA/Hubble Outreach (<http://www.spacetelescope.org>).
- 1999—2004: Film operator at the local cinema in my home town, KINO Ringsted.

2.5 Miscellaneous projects

- 2006: The Fits Liberator version 2.1 for Adobe Photoshop (http://www.spacetelescope.org/projects/fits_liberator/).
- 2005: The Fits Liberator version 2.0 for Adobe Photoshop
- 2004: The Fits Liberator version 1.0 for Adobe Photoshop.
- 2002: Astroex.org (<http://www.astroex.org>), educational webpage designed for highschool students.
- 2002: High school contest “ThinkQuest” participant with the webpage “Kosmologi” (<http://www2002162.thinkquest.dk/>).
- 2001: High school contest “ThinkQuest” participant with the webpage “Astronomia Nova” (<http://www2001119.thinkquest.dk>).
- 2000: High school contest “ThinkQuest” participant with the webpage “Elektricitet” (<http://www2000139.thinkquest.dk>).

2.6 Un-educated qualifications

- **Programming skills:** I develop software in the following languages on a routinely basis: C++, Java, IDL, Fortran and PHP.

2.7 References

PhD supervisor:

Jesper Hattel, Professor, PhD

Phone: +45 45 25 47 10

Email: jhat@mek.dtu.dk

Address:

DTU Department of Mechanical Engineering

Technical University of Denmark

Produktionstorvet

Bygning 425, rum 024

2800 Kgs.Lyngby

Master's Thesis supervisor:

Klaus Galsgaard, Associate professor, Ph.D

Phone: +45 35 32 58 94

Email: kg@astro.ku.dk

Address:

The Niels Bohr Institute, Computational Astrophysics

Juliane Maries Vej 30

2100 Copenhagen

Denmark

Head of Communication, ESA/Hubble

Lars Lindberg Christensen, M.Sc.

Phone: +49 (0) 89 320 06 306

Email: lars@eso.org

Address:

ESA/Hubble

ESO/ESA/ST-ECF

Karl-Schwarzschild-Strasse 2

D-85748 Garching bei München

Germany