PhDs Awarded for Research at NATIONAL ASTRONOMY & IONOSPHERE CENTER
Calendar Years 1965 – 2005

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Cornell University
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PhDs Awarded for Research at NAIC: Calendar Years 1965 – 2005

One hundred and seventy graduate students have been awarded PhDs for scholarly work done solely or primarily at the NAIC Arecibo Observatory over the last 40 years. These are all people of accomplishment many of whom are leaders in their fields today. In this report we include a list of all these people together with the title of their thesis, the year it was awarded and the name of the awarding institution.

A plot of the cumulative number of awardees is given below showing an unbroken rate of production of these people of achievement over 40 years.
Years | Theses Containing AO Data | Cornell Students
--- | --- | ---
1960s | 12 | 6
1970s | 53 | 27
1980s | 47 | 12
1990s | 38 | 23
2000-2002 | 11 | 5
2003-2005 | 12 | 7
**TOTAL** | **173** | **80**

**1965:**


**1966:**

Sutton, John, *The determination of the positions of radio sources*, University of Sydney, 1966.


**1967:**

**1968:**


**1969:**


1970:


1971:


1972:


1973:


1974:


1975:
Cordes, James Martin, *Pulsar microstructure: time scales, spectra, polarization, and radiation models*, University of California at San Diego, 1975.


Spangler, Steven R., *Radio astronomical observations of UV Ceti stars*, University of Iowa, 1975.

1976:

1977:
Bania, Thomas, M., *Carbon monoxide in the inner galaxy and related studies of galactic structure*, University of Virginia, 1977.


1978:


1979:


MacFarlane, Malcolm James, *Galaxy population analysis*, Texas University, 1979.


1980:
Fleisch, Daniel A., Jicamarca radar measurements of winds and turbulence in the stratosphere, Rice University, 1980.

Helou, George, Virgo cluster galaxies: neutral hydrogen studies, Cornell University, 1980.

Claussen, Mark J., Polarization properties of main-line OH maser emission from circumstellar shells of late-type variable stars, University of Iowa, 1981.

Coco, D. S., Interpreting electron temperature changes in the lower ionosphere, Rice University, Houston, TX, 1981.

Payne, Harry Edward, Neutral hydrogen 21 cm line emission-absorption observations of the interstellar medium, Cornell University, 1981.

Sato, Toru, Coherent radar measurements of the middle atmosphere and design concepts of the MU radar, Kyoto University, 1981.

Tepley, Craig Allen, An investigation of temperature and metallic composition of the lower ionosphere, Case Western Reserve University, 1981.

Tomko, Albert Andrew, Nonlinear phenomena arising from radio wave heating of the lower ionosphere, Pennsylvania State University, 1981.

1982:
Burns, Barbara Ann, Cratering analysis of the surface of Venus as mapped by 12.6cm radar, Cornell University, 1982.

Chandler, Michael Owens, Theory and observations of the low and mid-latitude ionosphere, University of Michigan, 1982.

Frey, A., HF produced ionospheric electron density irregularities diagnosed by UHF radio star scintillations, Rice University, 1982.

La Hoz Vergara, Cesar Augusto, Studies of the self-focussing instability during ionospheric heating experiments, Cornell University, 1982.

Noble, Stephen T., Traveling ionospheric disturbances associates with space shuttle launches, Rice University, 1982.

Stinebring, Daniel R., Pulsar polarization: dual-frequency observations and the production of orthogonally polarized radiation, Cornell University, 1982.

1983:
Breakall, James K., On the absolute calibration and theoretical justification of high resolution ionospheric results obtained from Arecibo radar measurements, Case Western University, 1983.

Coster, Anthea Jane, The temporal evolution of short scale striations in the heated ionosphere, Rice University, 1983.

Kulkarni, Shrinivas Ramchandra, *Studies of galactic HI in 21 cm absorption*, University of California at Berkeley, 1983.

**1984:**


Burnside, Roger George, *Dynamics of the low-latitude thermosphere and ionosphere*, University of Michigan, 1984.


Santoru, Joseph, *Low and high latitude ionospheric modification experiments*, University of California at Los Angeles, 1984.

**1985:**

German, Mark Jeffrey, *Interference detection and correction while performing ionospheric studies with an incoherent scatter radar*, Case Western Reserve University, 1985.


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**2002:**  


Urbina, Julio, *VHF radar studies of the mid-latitude E-region ionosphere from Camp Santiago, PR*, University of Illinois, Urbana-Champaign, 2002.


**2003:**  


**2004:**  


**2005:**


