

宇宙線・宇宙物理領域，素粒子論領域合同シンポジウム

「超高エネルギーガンマ線天文学と Cherenkov Telescope Array (CTA) 計画」

“TeV gamma-ray astronomy and
the Cherenkov Telescope Array (CTA) project”

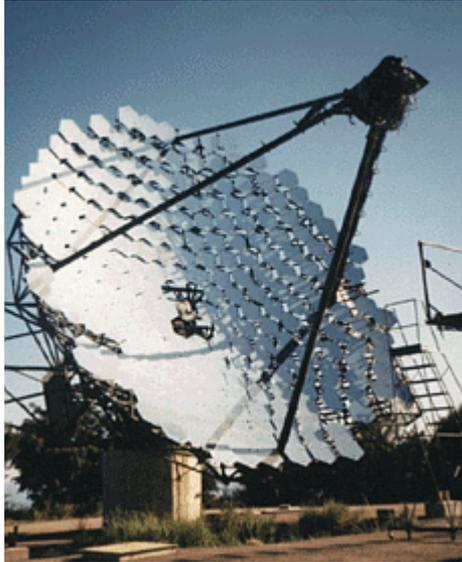


Introduction

Hidetoshi Kubo (Dept. of Phys., Kyoto University)

TeV gamma-ray observations with Imaging Atmospheric Cherenkov Telescopes

Whipple 10 m



Detection of the Crab nebula in 1989

HEGRA



CANGAROO

etc



North Hemisphere

MAGIC

17 m×2



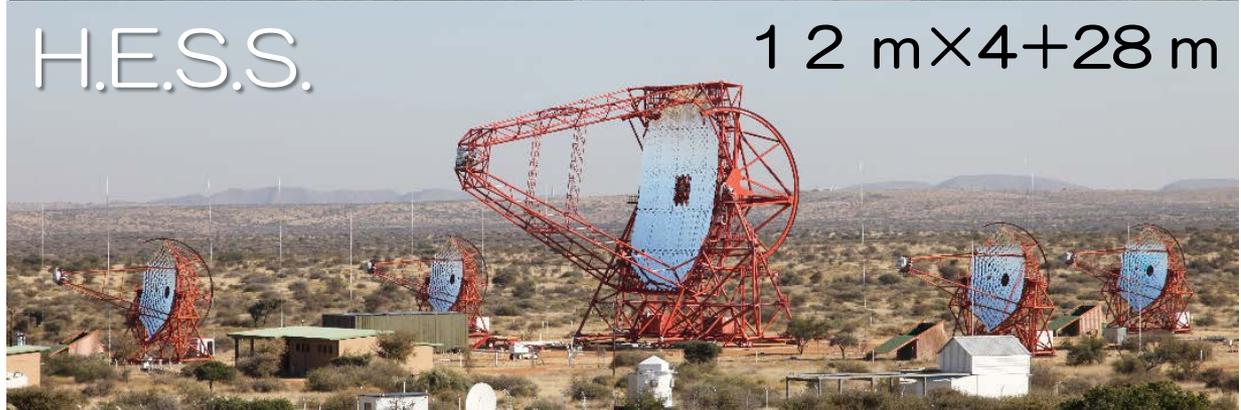
VERITAS

12 m×4



H.E.S.S.

12 m×4+28 m



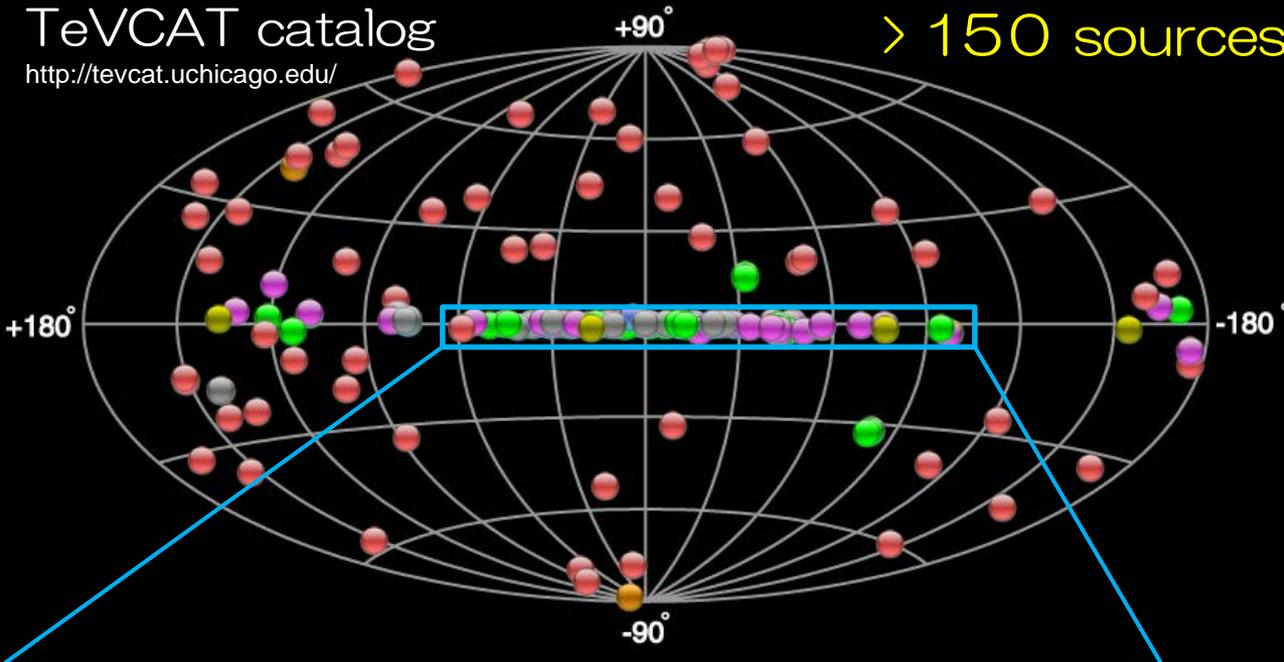
South

TeV Gamma-ray Skymap

TeVCAT catalog

<http://tevcat.uchicago.edu/>

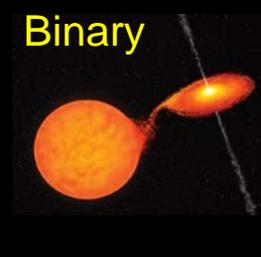
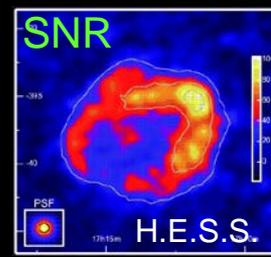
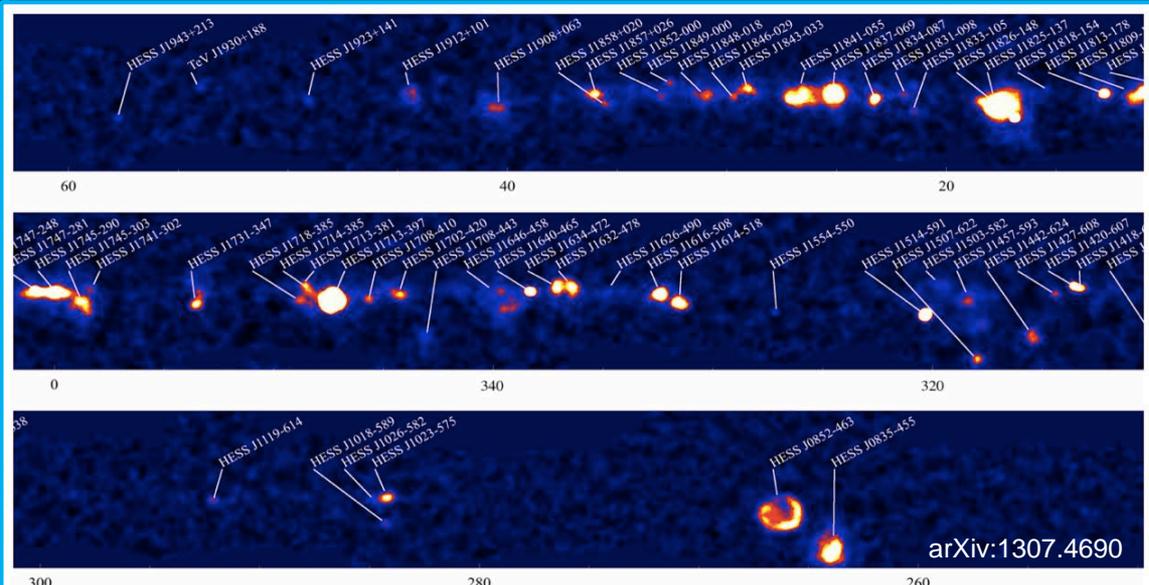
> 150 sources



- Starburst
- HBL, IBL, FRI, FSRQ, LBL, AGN (unknown type)



- Globular Cluster, Star Forming Region, uQuasar, Cat. Var., Massive Star Cluster, BIN, BL Lac (class unclear), WR
- Shell, SNR/Molec. Cloud, Composite SNR
- DARK, UNID, Other
- Binary, XRB, PSR, Gamma BIN
- Pulsar wind nebula

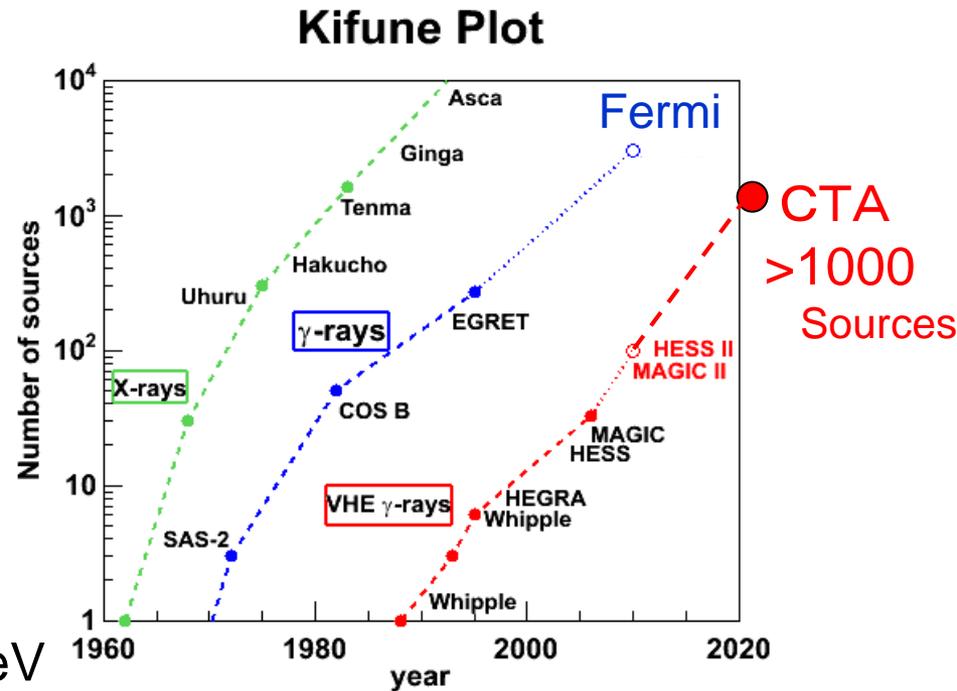
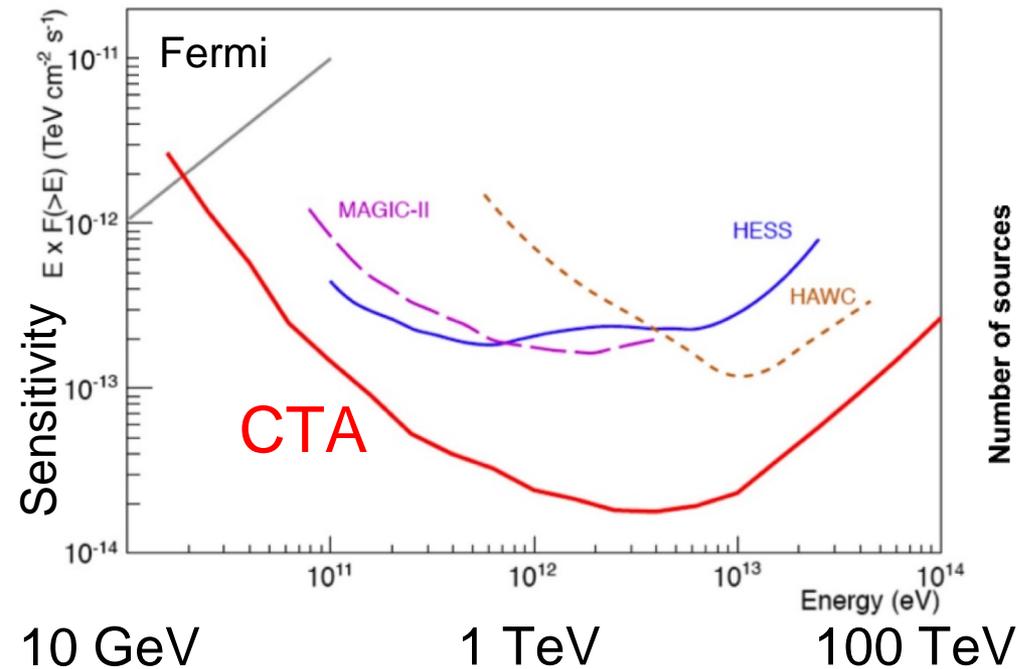
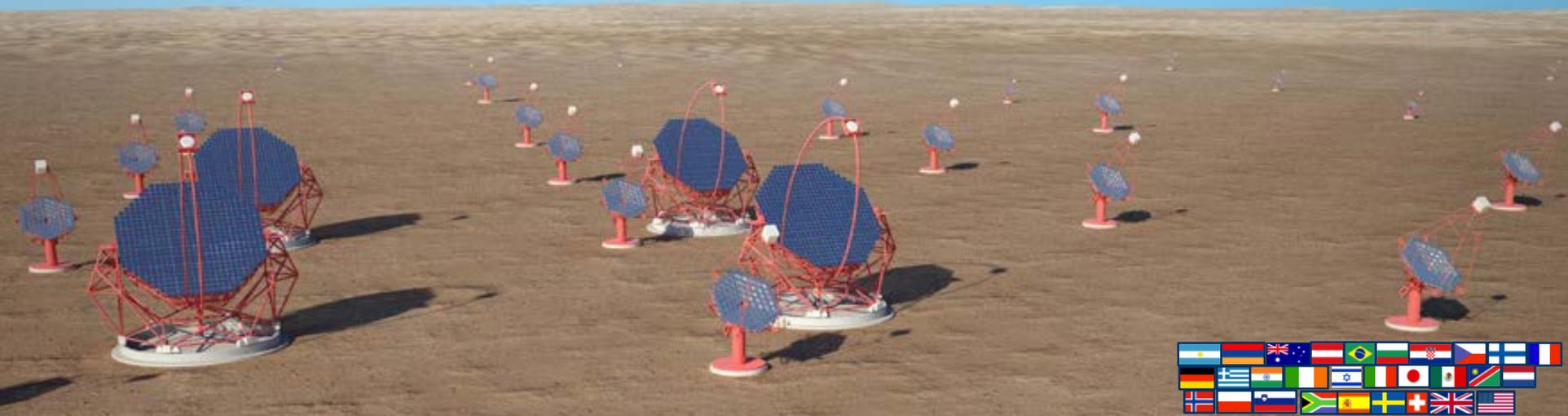


H.E.S.S.
Galactic Plane Survey
> 60 sources (unID ~ 30%)

Cherenkov Telescope Array (CTA)



<http://www.cta-observatory.org/>



Talks in this symposium



① “Status of the CTA project”
Werner Hofmann
(MPIK)

② “Status of the CTA-Japan 
Consortium and the strategy”
Masahiro Teshima
(ICRR, Univ. Tokyo/MPP)

TeV Gamma rays

③ “CTA Physics Drivers”
Kunihito Ioka
(KEK)

④ “Prospects for CTA
observations of a young
SNR RX J1713.7-3946”
Takeshi Nakamori
(Yamagata Univ.)

⑤ “TeV Gamma-ray from
Dark Matter Annihilation”
Shigeki Matsumoto
(IPMU, Univ. Tokyo)



Multiwavelength



GeV Gamma rays
Yasushi Fukazawa
(Hiroshima Univ.)

X-rays
Tadayuki Takahashi
(ISAS/JAXA)