

IceCube: Neutrinos on the Rocks

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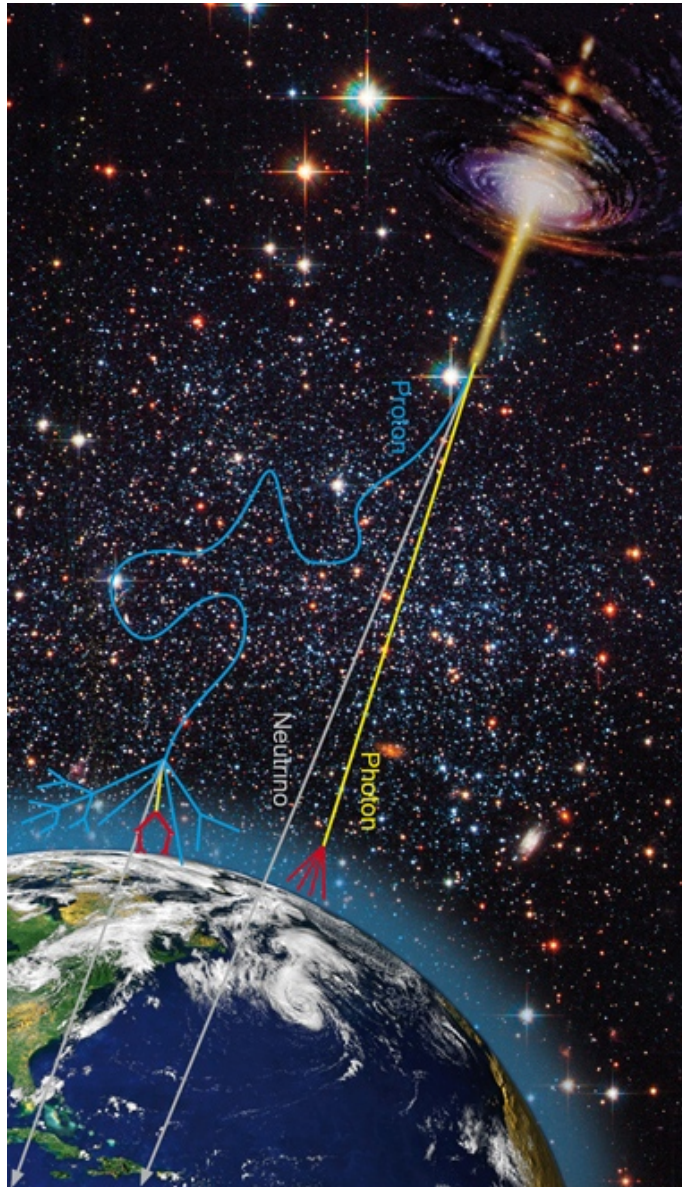
<http://www.iihe.ac.be>



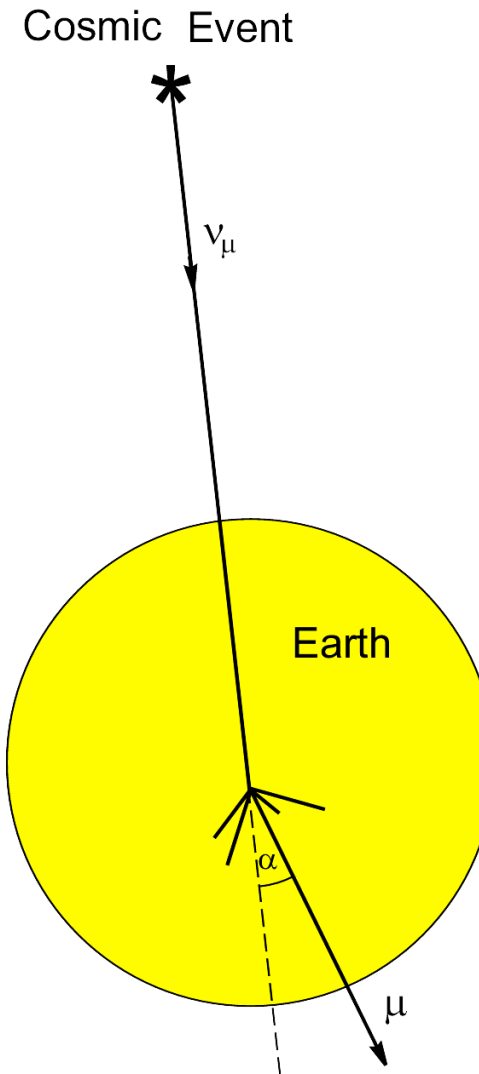
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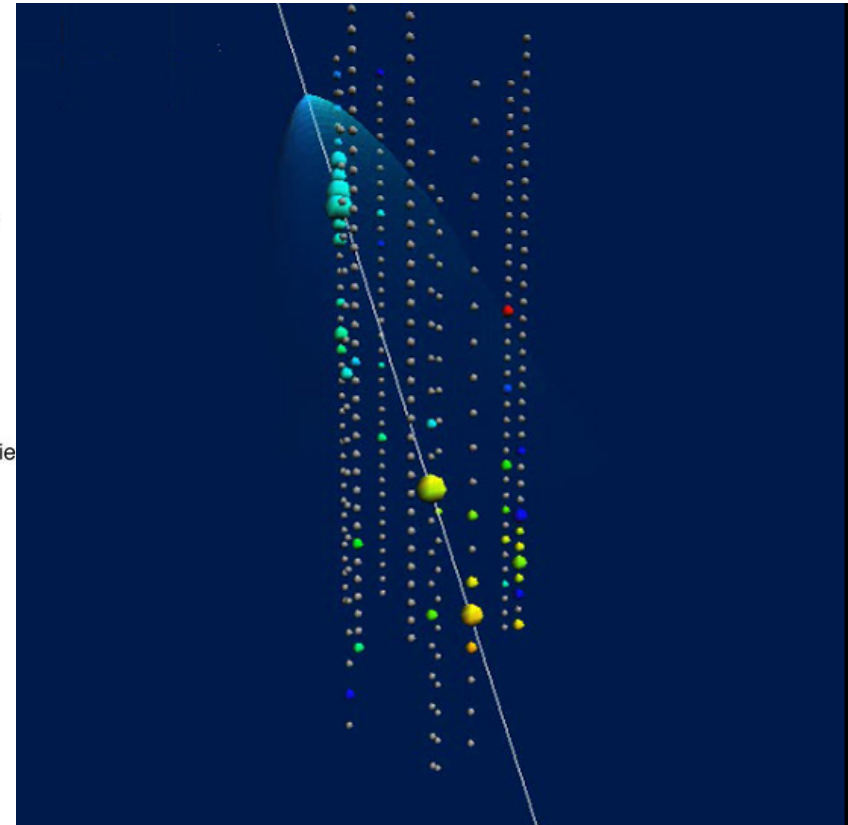
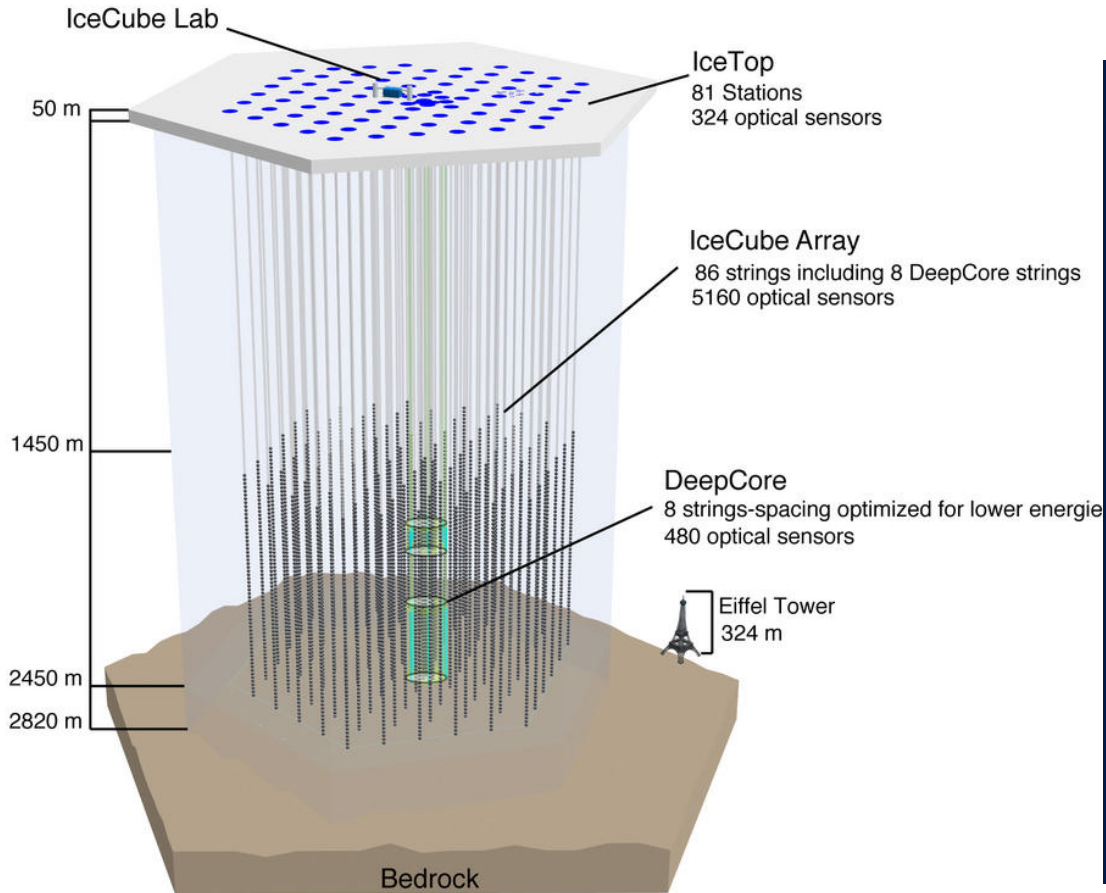
Overview

Why Neutrinos?	1
The IceCube Neutrino Observatory at the South Pole	2
The neutrino sources we have discovered so far	3



Neutrino detection principle





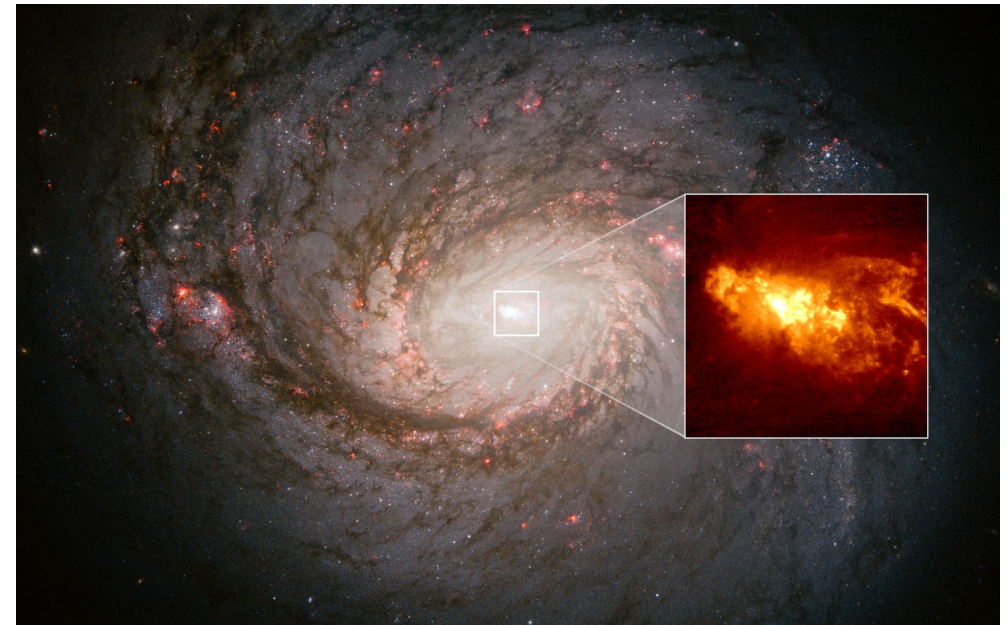
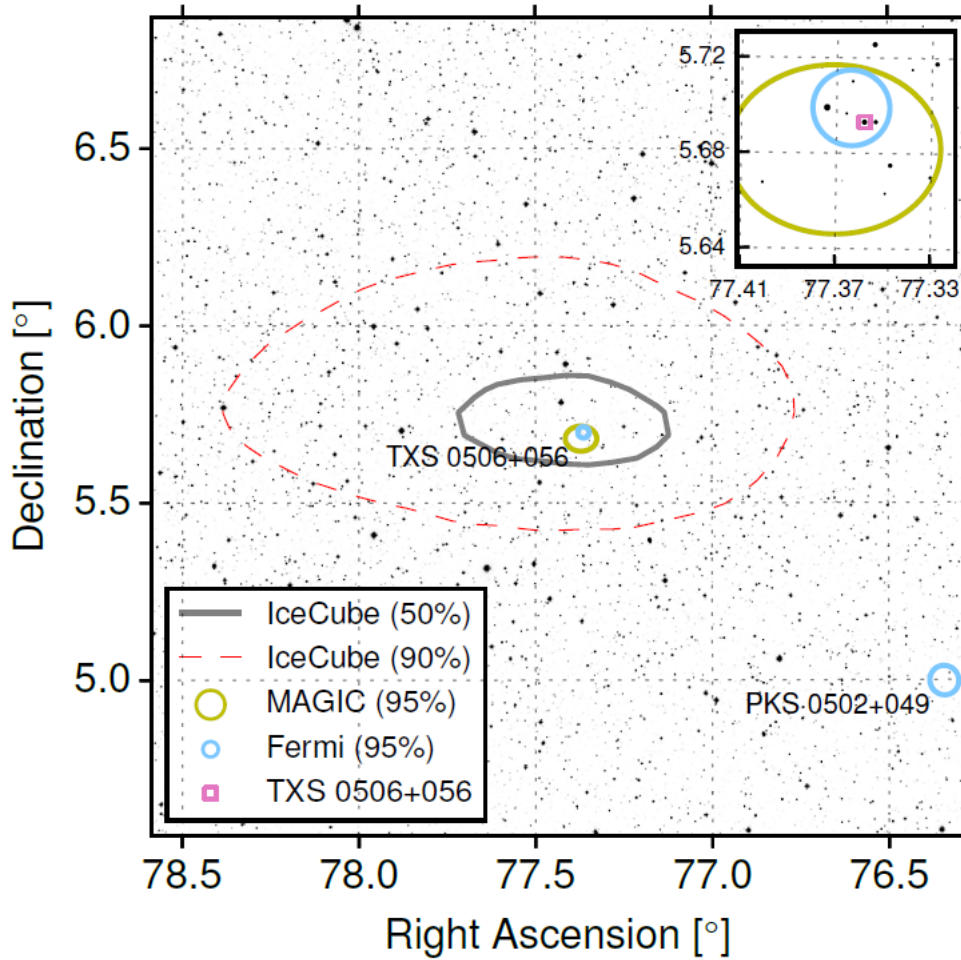
**86 strings, 5160 optical sensors,
instrumented volume $\sim 1 \text{ km}^3$**

The Blazar TXS 0506+056

(Science 361, (2018) 147)

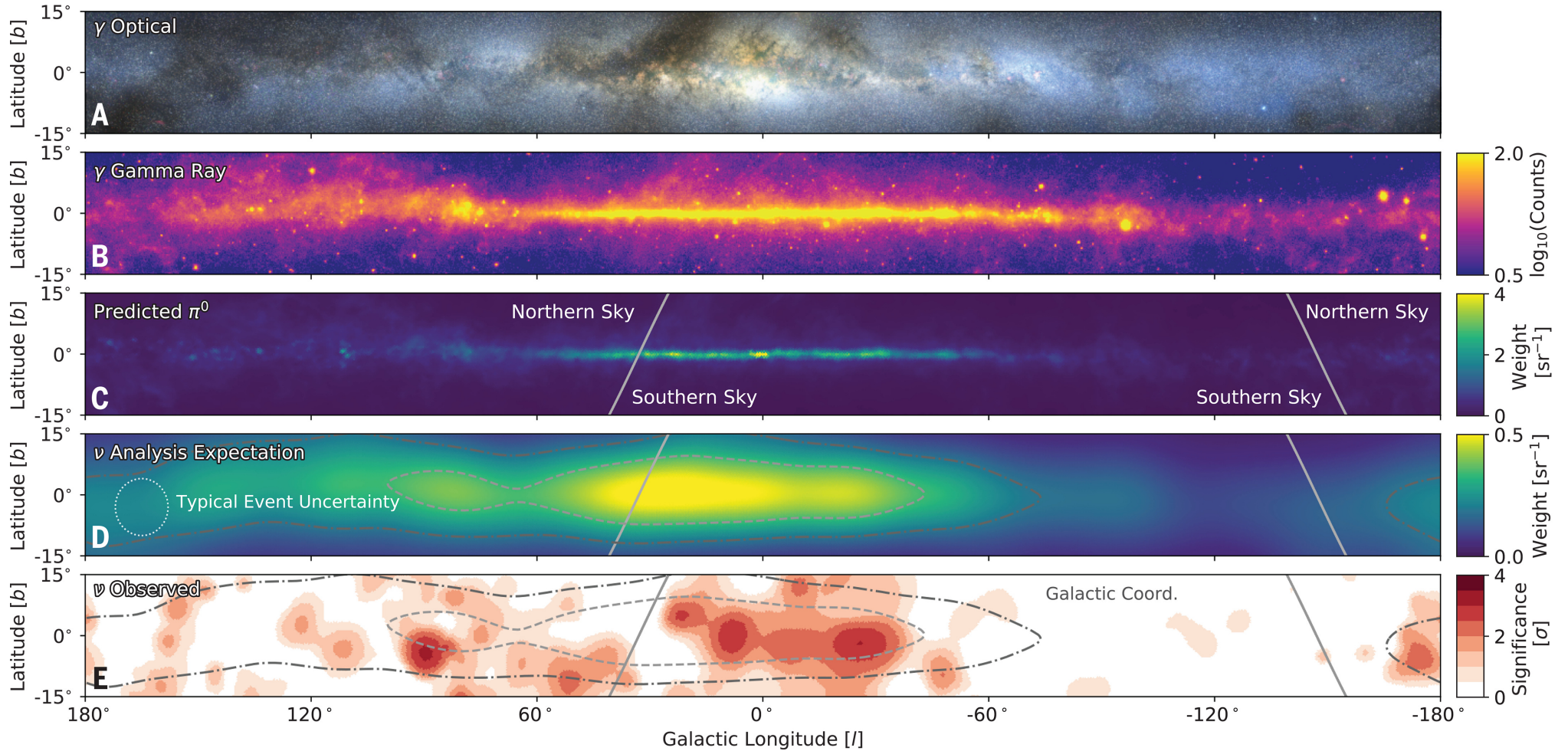
The active galaxy NGC1068

(Science 378, 6619 (2022) 538)



... and we now "see" also our Galactic plane in neutrinos !

(Science 380, 6652 (2023) 1338)



IceCube has opened the field of Neutrino Astronomy !

A History of Neutrino Astronomy in Antarctica

