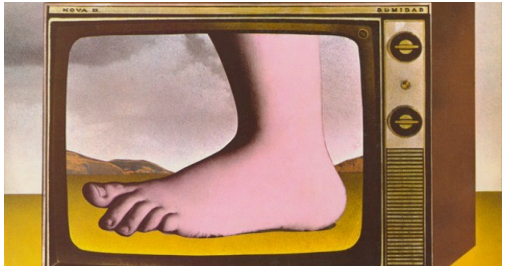
Python para Arquitetos e Urbanistas

FERNANDO FERRAZ RIBEIRO

PYTHON

Linguagem de programação interpretada, multi-paradigma, multi-plataforma, orientada a objetos, imperativa, funcional, procedural, reflectiva e de código aberto.

Criada em 1989/1991 por Guido van Rossum



“I was looking for a "hobby" programming project that would keep me occupied during the week around Christmas. My office (a government-run research lab in Amsterdam) would be closed, but I had a home computer, and not much else on my hands. I decided to write an interpreter for the new scripting language I had been thinking about lately: a descendant of ABC that would appeal to Unix/C hackers. I chose Python as a working title for the project, being in a slightly irreverent mood (and a big fan of Monty Python's Flying Circus). “

Guido van Rossum

PYTHON

“ O conjunto de peças de xadrez Bauhaus de Josef Hartwig é um exemplo de design excelente: bonito, simples e claro. Guido von Rossum, filho de um arquiteto e irmão de um designer de fontes premiado, criou uma obra-prima do design de linguagens. Adoro ensinar Python porque ela é bonita, simples e clara.”

Luciano Ramalho. Python Fluente
2016

APIs PYTHON PARA ARQUITETOS


Blender


Maya

Rhino 3D


Grasshopper


FreeCad

ArcGIS


QGIS


Revit


Dynamo


FUSION

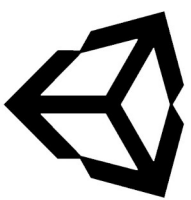

ARCHICAD


Vectorworks


IFC OPEN SHELL


KRITA

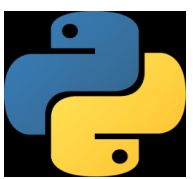
3DS MAX


UNIT

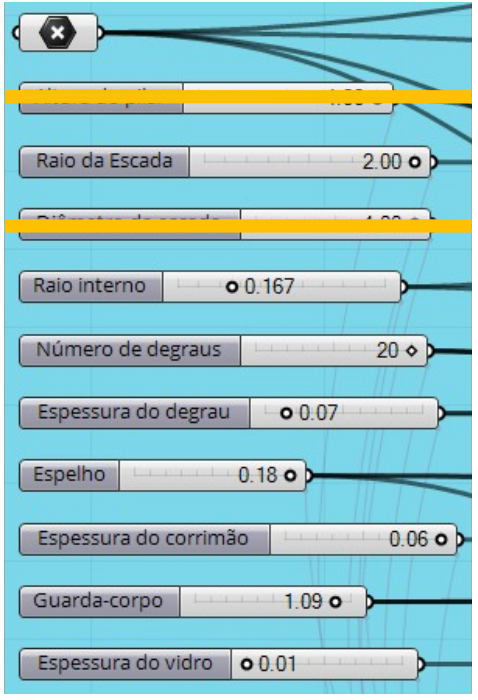

GODOT


INKSCAPE


GIMP



MODELAGEM PARAMÉTRICA



O UNIVERSÓ É O LIMITE

Python Used to Take Photo of Black Hole

The Astrophysical Journal Letters, 875:L3 (32pp), 2019 April 10 https://doi.org/10.3847/2041-8213/ab0c57

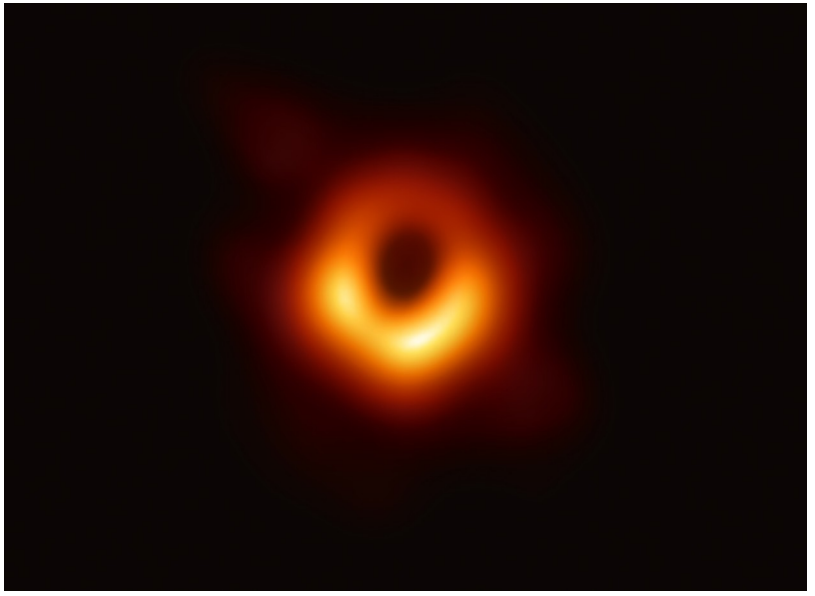
First M87 Event Horizon Telescope Results. III. Data Processing and Calibration

The Event Horizon Telescope Collaboration
(See the end matter for the full list of authors.)
Received 2019 February 11; revised 2019 March 3; accepted 2019 March 3; published 2019 April 10

Abstract

We present the calibration and reduction of Event Horizon Telescope (EHT) 1.3 mm radio wavelength observations of the supermassive black hole candidate at the center of the radio galaxy M87 and the quasar 3C 279, taken during the 2017 April 5–11 observing campaign. These global very long baseline interferometric observations include for the first time the highly sensitive Atacama Large Millimeter/submillimeter Array (ALMA); reaching an angular resolution of 25 μas, with characteristic sensitivity limits of $\sim$1 mJy on baselines to ALMA and $\sim$10 mJy on other baselines. The observations present challenges for existing data processing tools, arising from the rapid atmospheric phase fluctuations, wide recording bandwidth, and highly heterogeneous array. In response, we developed three independent pipelines for phase calibration and fringe detection, each tailored to the specific needs of the EHT. The final data products include calibrated total intensity amplitude and phase information. They are validated through a series of quality assurance tests that show consistency across pipelines and set limits on baseline systematic errors of 2% in amplitude and 1° in phase. The M87 data reveal the presence of two nulls in correlated flux density at $\sim$3.4 and $\sim$8.3 Gλ and temporal evolution in closure quantities, indicating intrinsic variability of compact structure on a timescale of days, or several light-crossing times for a few billion solar-mass black hole. These measurements provide the first opportunity to image horizon-scale structure in M87.

Key words: black hole physics – galaxies: individual (M87, 3C279) – galaxies: jets – techniques: high angular resolution – techniques: interferometric



https://www.blog.pythonlibrary.org/2019/04/11/python-used-to-take-photo-of-black-hole/