

# MAGIC through the eyes of ~~the spokesmen~~ its King



Juan Cortina  
“15 years of MAGIC”  
27-29 June 2018  
Hotel Taburiente Playa



1995: "XXIV ICRC" Rome and "Towards a major..." IV in Padova



Groundbreaking: MAGIC 1

IFAE is here to install a camera.  
Where's the telescope?



2002

Eckart, on the proposal to build a control house:  
“Really good science is always made  
in a container”

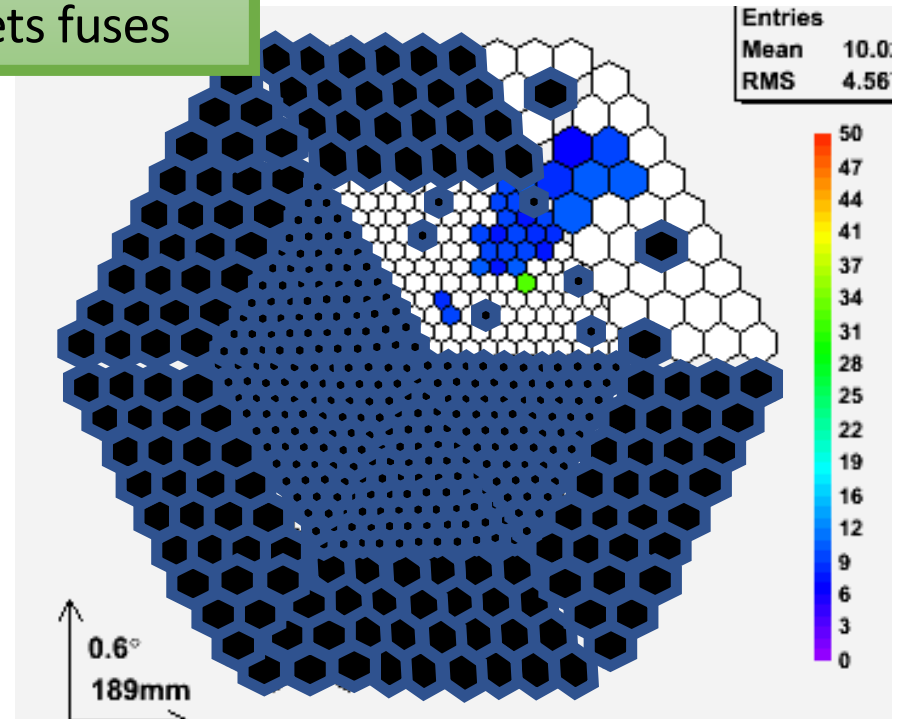




How did I get into  
this?

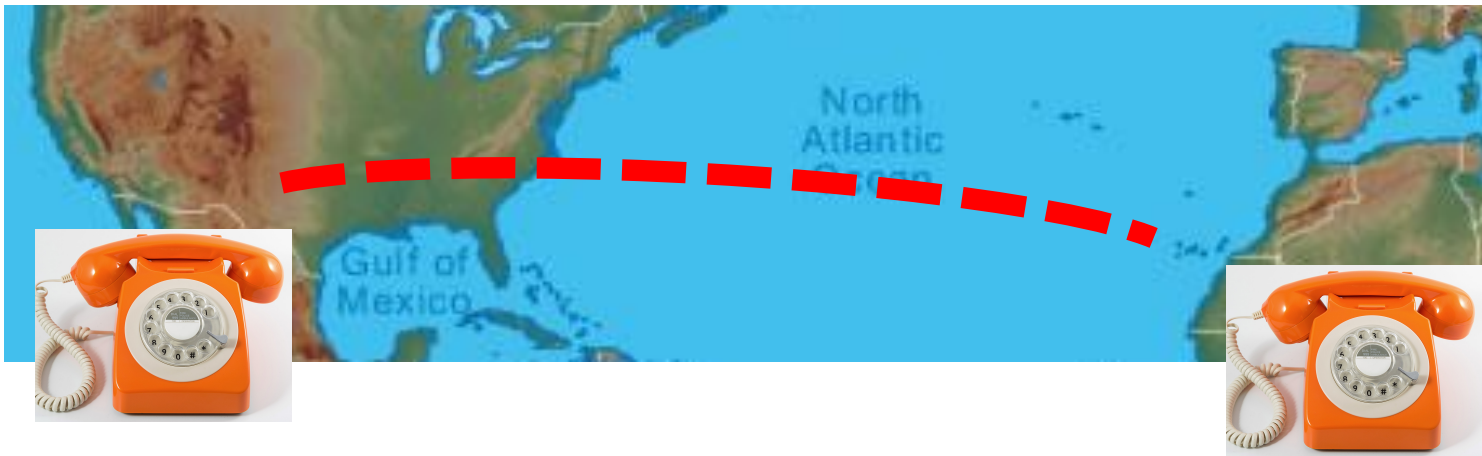
# MAGIC's first event

Juan runs camera and control,  
Florian runs DAQ and resets fuses



# MAGIC's first event

Only consolation: VERITAS was even slower than us 😊





LS I+61 303

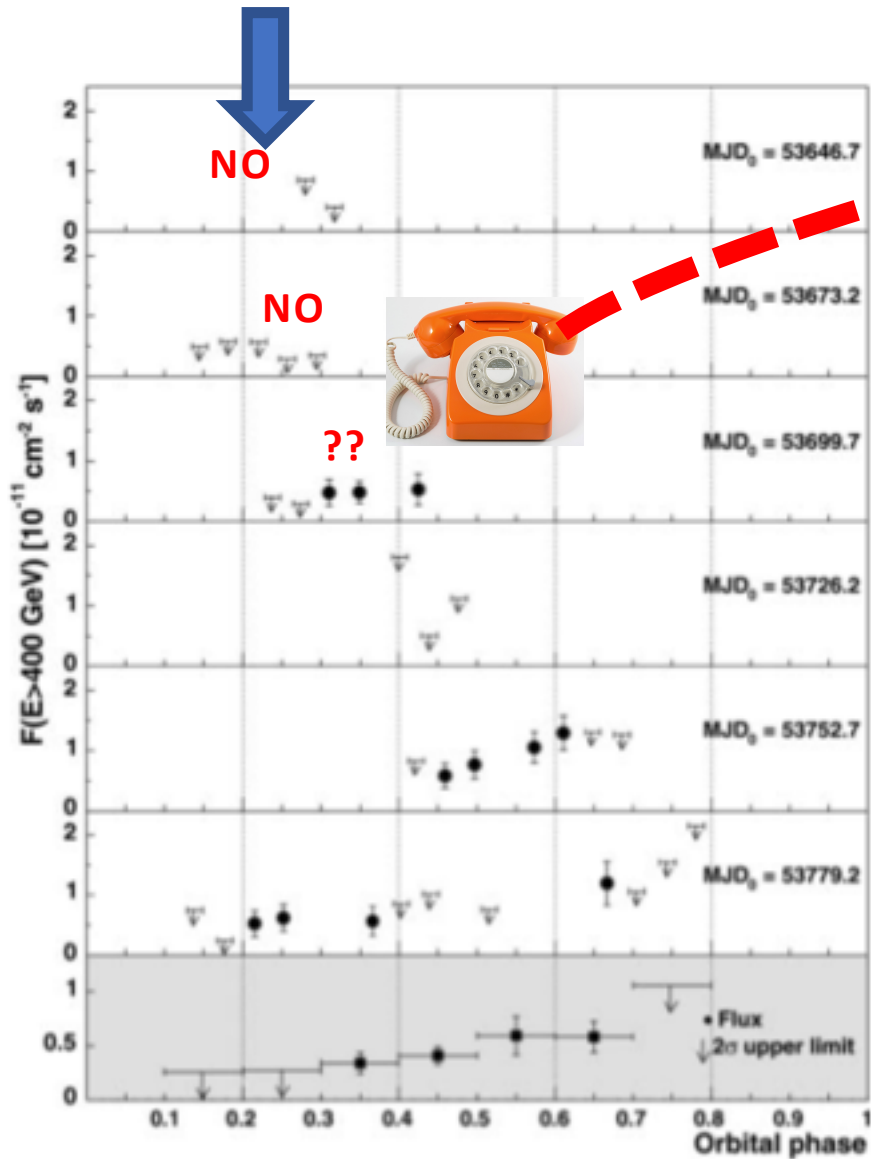
# LS I team at IFAE (and Emma\*)



ICRC Merida 2007

\* maybe representing Diego Torres...

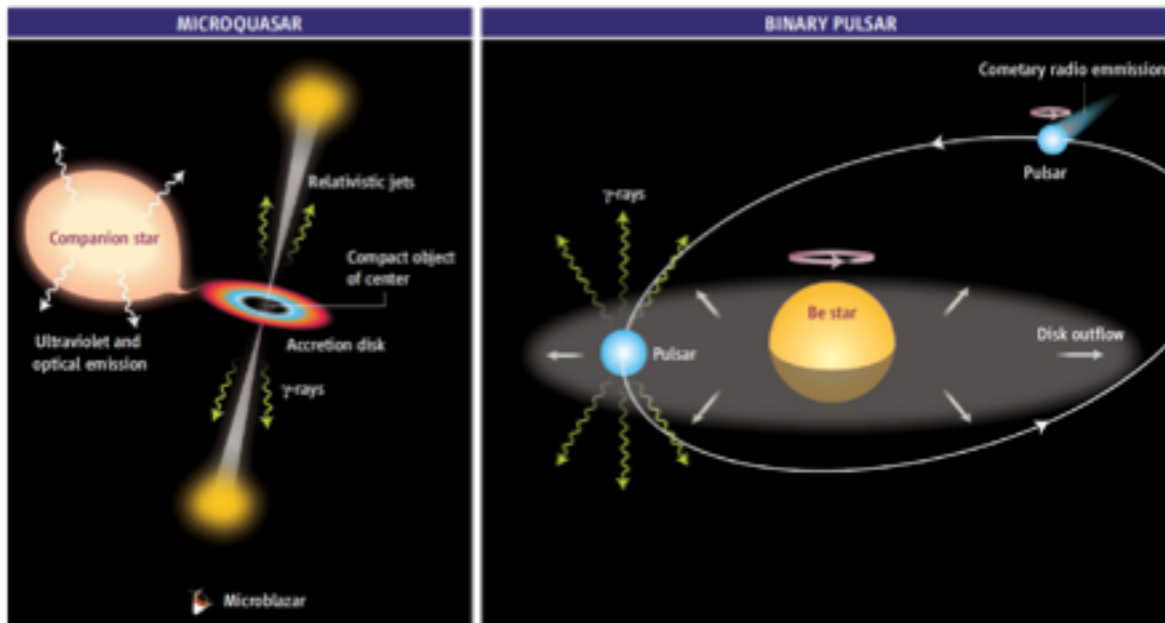
# Focus at periastron



My favorite scheduler

# Variable Very-High-Energy Gamma-Ray Emission from the Microquasar LS I +61 303

J. Albert,<sup>3</sup> E. Aliu,<sup>2</sup> H. Anderhub,<sup>3</sup> P. Antoranz,<sup>4</sup> A. Armada,<sup>2</sup> M. Asensio,<sup>4</sup> C. Baixeras,<sup>5</sup>  
J. A. Barrio,<sup>4</sup> M. Bartelt,<sup>6</sup> H. Bartko,<sup>7</sup> D. Bastieri,<sup>8</sup> S. R. Bavikadi,<sup>9</sup> W. Bednarek,<sup>10</sup> K. Berger,<sup>1</sup>



- First MAGIC paper in Science: 2006
- Real psychological breakthrough for collaboration



"Sir, it's time to upgrade our technology. We've used up the last of our computer punch cards."

# Upgrade (or bust)

# First I was upgraded



Father of twins, September 2011

# Then I was upgraded again



Spokesman of MAGIC, January 2012

# And then MAGIC went for its upgrade

I  PLANNING

Plan:

- ✓ Replace MAGIC-1 camera with clone of MAGIC-2 camera.
- ✓ Replace both readouts with new ones.
- ✓ Install new sumtrigger.



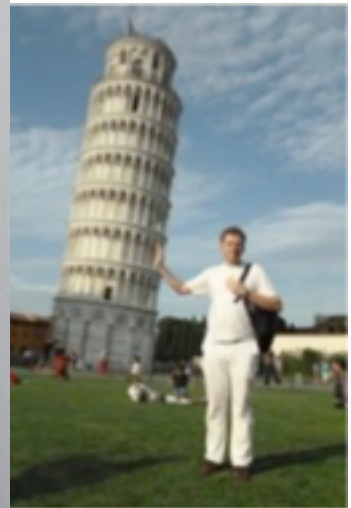
# Plan faces reality

Reality:

- ✗ New MAGIC-1 camera is (perhaps) too heavy
- ✗ MAGIC-1 arch cracks
- ✗ Delay in new readout
- ✗ No sumtrigger in sight
- ✗ Old MAGIC-1 camera burns





# But we made it



# MAGIC reloaded

Best performance ever,  
Easy to maintain and reliable.  
Stable ever since.



- Upgrade completed: Summer 2012
  - 12/13 November 2012 : IC 310 flares
- 

## RESEARCH ARTICLES

### BLACK HOLE PHYSICS

# Black hole lightning due to particle acceleration at subhorizon scales

J. Aleksić,<sup>1</sup> S. Ansoldi,<sup>2</sup> L. A. Antonelli,<sup>3</sup> P. Antoranz,<sup>4</sup> A. Babic,<sup>5</sup> P. Bangale,<sup>6</sup>

First Science  
paper with  
MAGIC stereo

Conclusions



FARMACIA

# farmacia dr. cortina

FARMACIA



AGENZIA VIAGGI **VVS**

- BILLETTERIA FERROVIARIA
- AEREA - MARITTIMA
- ORGANIZZAZIONI VIAGGI INDIVIDUALI E DI GRUPPO
- SOGGIORNI E CRUCIERE
- VACANZE STUDIO

In via Daverio, 13  
 Tel. 0432/221111  
 WWW.VVS.IT



Bonus



ICRC Rome 1995