

IAUS 331: « SN 1987A, 30 years later »

20-24 February 2017, La Reunion Island

Bienvenu zot tout' !



IAU IAU Symposium 331

SN 1987A, 30 years later
Cosmic Rays and Nuclei from Supernovae and their aftermaths

FEBRUARY 20-24, 2017
Saint-Gilles, La Réunion Island, France

TOPICS:

- Latest evolutionary stages of massive stars
- Stellar progenitors and diversity in Supernovae
- SN 1987A, thirty years later
- Explosion mechanisms and nucleosynthesis
- Particle acceleration and origin of cosmic rays
- Multi-wavelength/multi-messenger data
- Prospectives with future, post-2018, instruments

SCIENTIFIC ORGANIZING COMMITTEE:

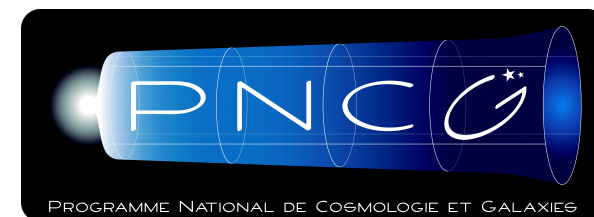
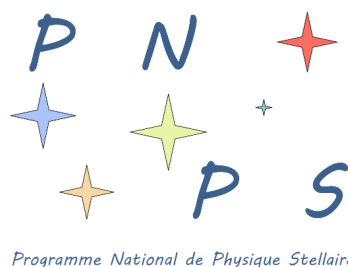
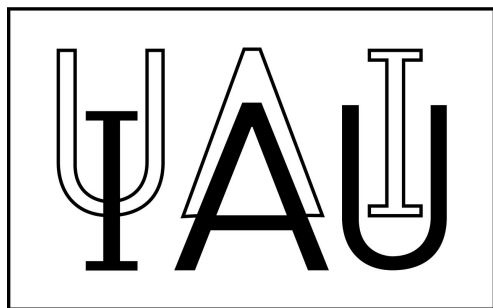
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Roland Diehl *Germany*, Gloria Dolores *Argentina* (Co-Chair),
Fiona Harrison *USA*, Hans Thomas Janka *Germany*,
Marianne Lemoine-Goumard *France*, Alexandre Marcowith *France* (Co-Chair), Georges Meynet *Switzerland*, Alak Ray *India* (Co-Chair), Matthieu Renaud *France*, Samar Safi-Harb *Canada*, Stephen Smartt *UK*, Patricia Whitelock *South-Africa*

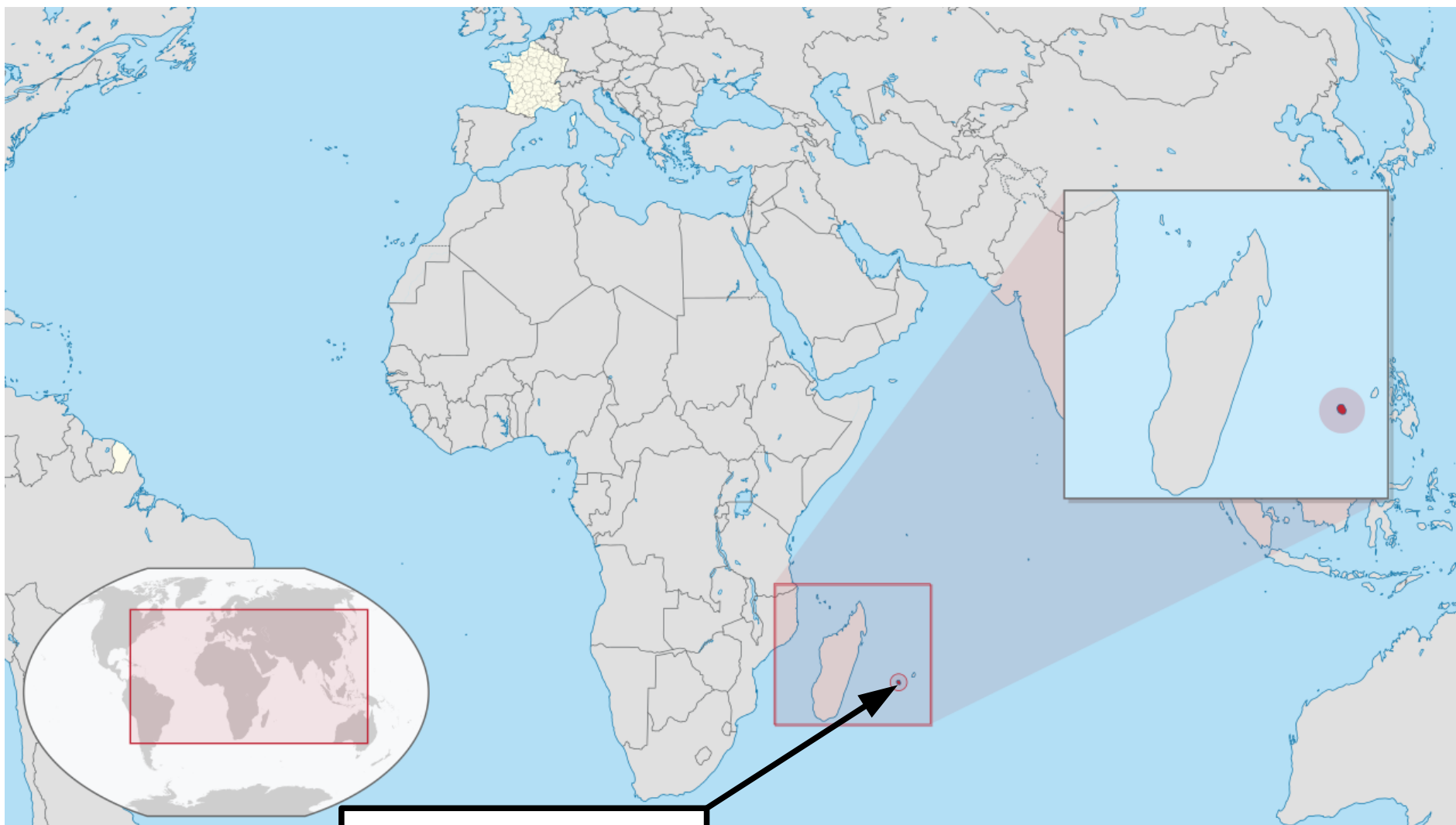
LOCAL ORGANIZING COMMITTEE:

Sylviane Collado *LUPM France*,
Marie-Hélène Grondin *CENBG France*,
Agnès Lèbre *LUPM France*,
Alexandre Marcowith *LUPM France* (Co-Chair),
André Peyrot *Les Makes Observatory France*,
Matthieu Renaud *LUPM France* (Co-Chair)

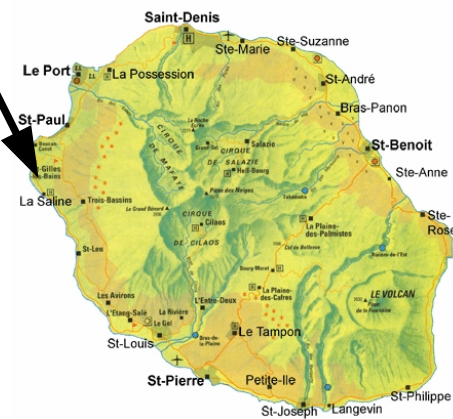
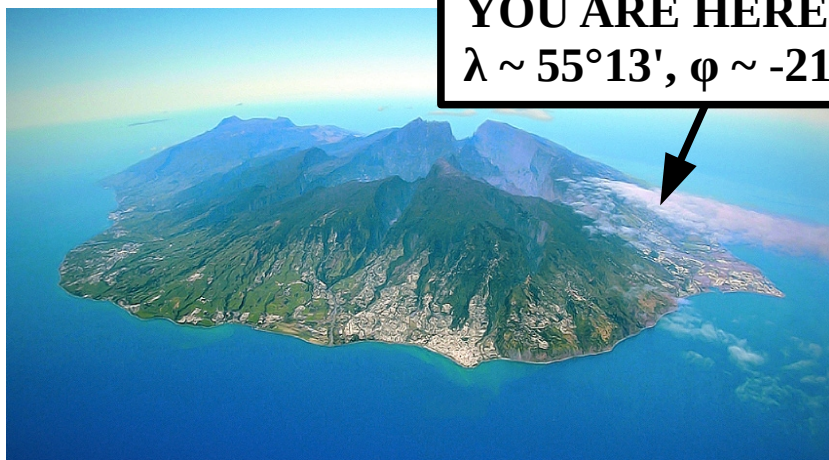
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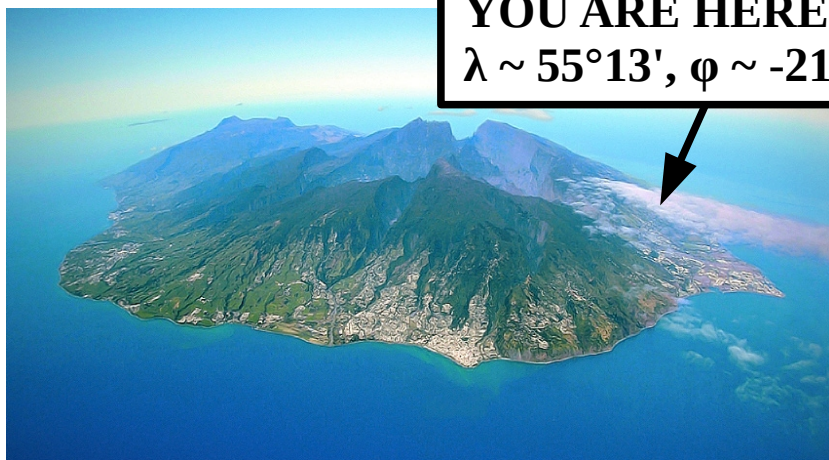
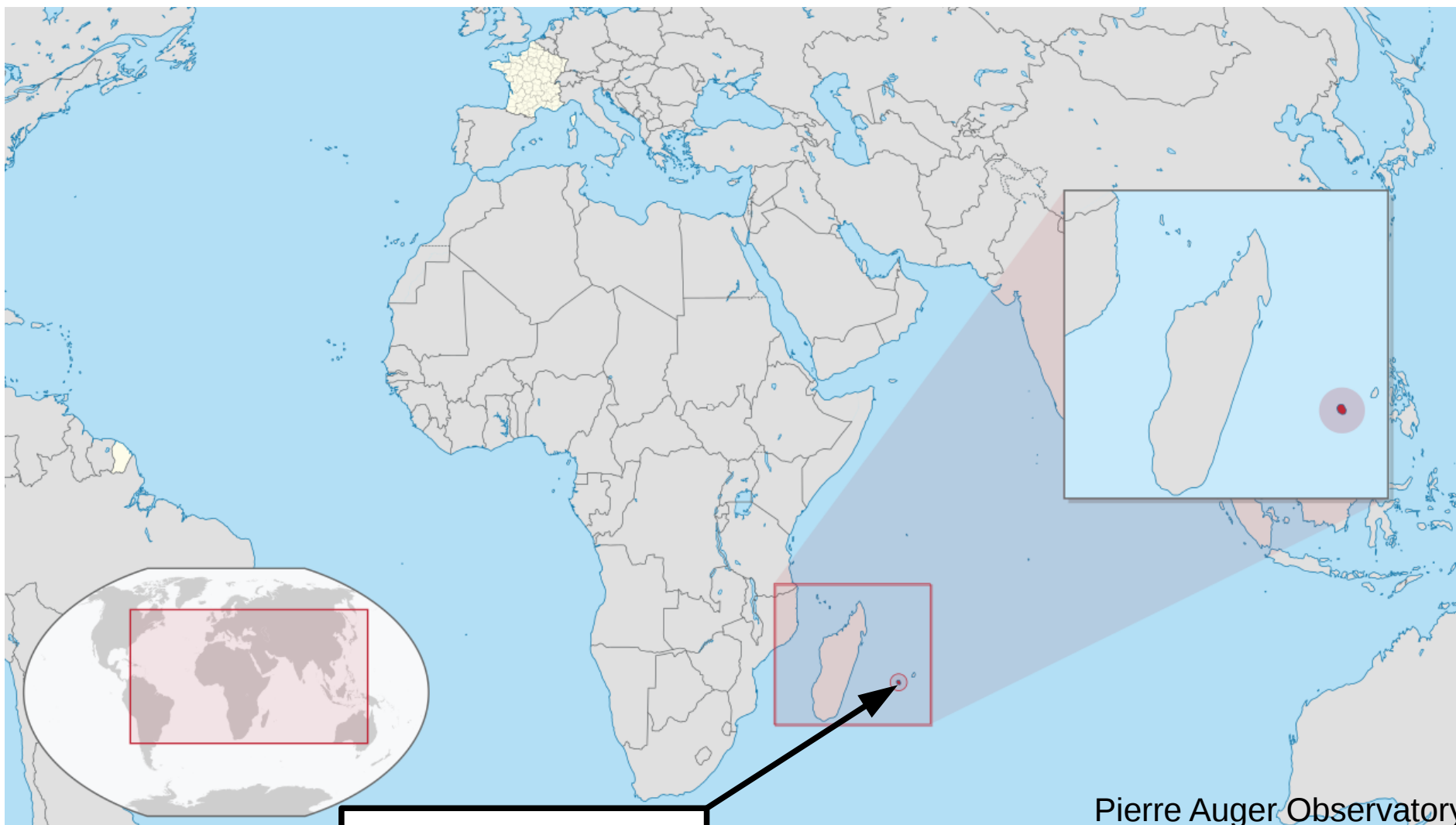
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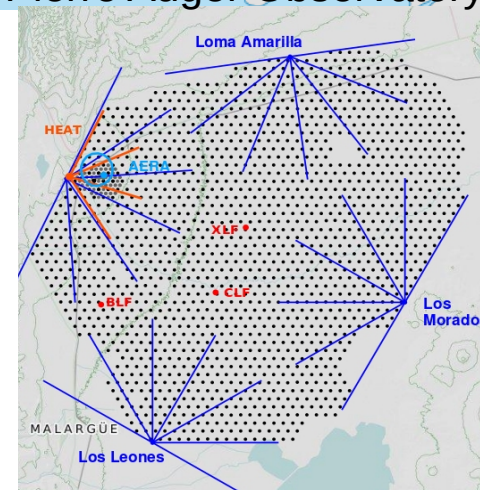


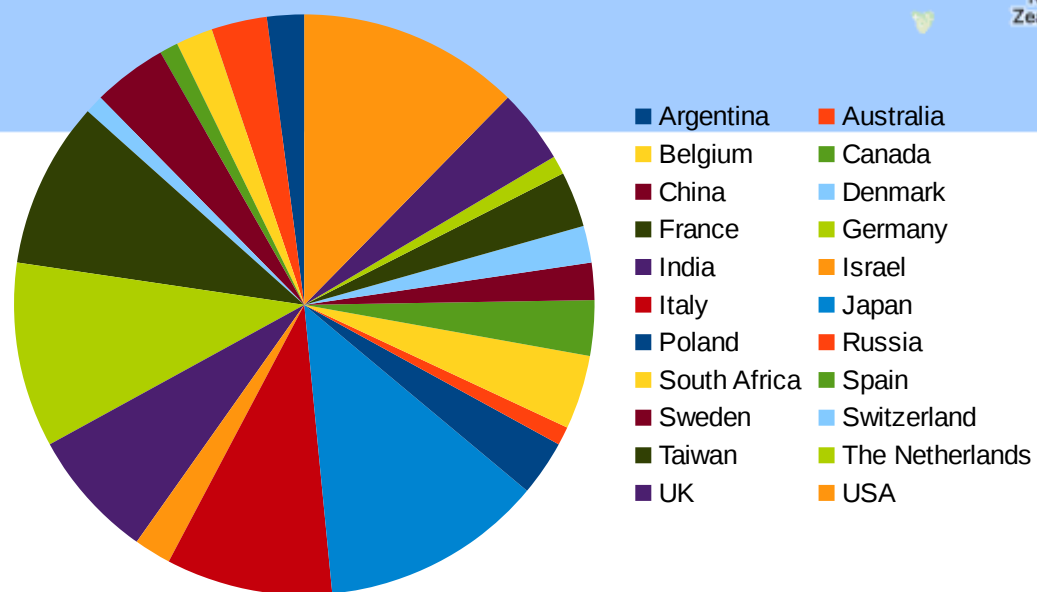
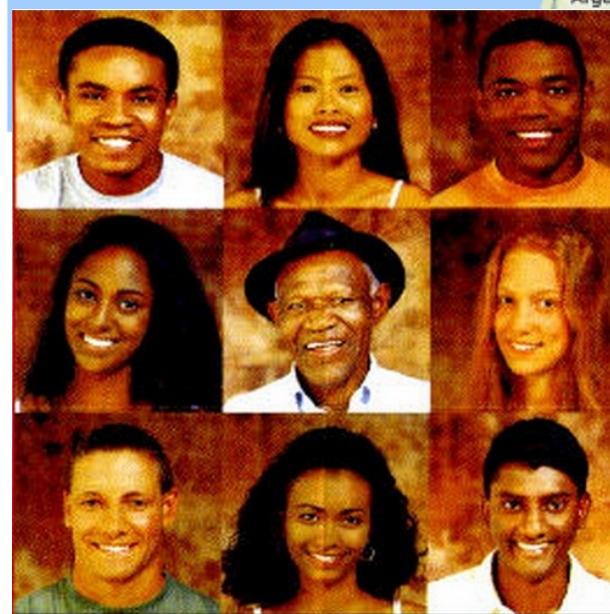
YOU ARE HERE!
 $\lambda \sim 55^{\circ}13'$, $\phi \sim -21^{\circ}1'$





Pierre Auger Observatory





La Réunion: a contrasting island

The so-called «NRL » (New Coastal Road), the most expensive road in France (1.6 G€) !



About half of the island included in the list of natural sites of the UNESCO World Heritage



The Scientific Program of the IAUS 331 Symposium is comprised of 7 sessions, for a total of 75 talks including 56 Contributed (15+5 min) and 19 Invited (25+5 min), and 11 posters.

1) Massive Stars as SN progenitors: RSGs/BSGs/WRs and their surroundings – Stellar Evolution

Monday, 09:00 – 10:30 : 3×C, 1×I & 11:00 – 12:30 : 3×C, 1×I

2) SN explosion mechanisms: theory & ND simulations of neutrino-/non-neutrino-driven mechanisms

Monday, 14:00 – 15:30 : 3×C, 1×I & 16:00 – 17:50 : 4×C, 1×I

3) SNe as stellar explosive outcomes: SN taxonomy & properties – SN-GRB connection

Tuesday, 09:00 – 10:30 : 3×C, 1×I & 11:00 – 12:30 : 3×C, 1×I

4) SN outcomes and impacts: SNRs : dynamics, ejecta, dust – Nucleosynthesis – Feedback on ISM

Tuesday, 14:00 – 15:30 : 3×C, 1×I & 16:00 – 17:30 : 3×C, 1×I & Wednesday, 14:00 – 15:20 : 4×C & 15:50 – 17:20 : 3×C, 1×I

5) Poster Session: Wednesday, 17:30 – 18:30 with 3+2-min talks

6) Particle acceleration and Origin of Cosmic Rays: DSA Theory, B-field constraints – Review on CRs

Thursday, 09:00 – 10:40 : 2×C, 2×I & 11:10 – 12:30 : 4×C

6) SN 1987A, 30 years later: Historical review – Multi-wavelength properties of the remnant

Thursday, 14:00 – 15:30 : 3×C, 1×I & 16:00 – 18:30 : 3×C, 3×I

7) Non-thermal mwl/multi-messenger data on SNRs – GWs, Neutrinos – Future facilities & perspectives

Friday, 09:00 – 10:30 : 3×C, 1×I & 11:00 – 12:30 : 3×C, 1×I & 14:00 – 17:30 : 6×C, 2×I

All of the above will take place in the « Leconte de Lisle » conference room

Someone will be there at 08:30 every mornings → **come see us to test the material in advance**

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→ Talk on the Nature Marine Reserve on Monday at 18:30

3) SNe as stellar explosive outcomes: SN taxonomy & properties – SN-GRB connection

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→ Bus excursion to Le Maïdo on Wed. (07:00-12:00)

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6) SN 1987A, 30 years later: Historical review – Multi-wavelength properties of the remnant

Thursday, 14:00 – 15:30 : 3×C, 1×I & 16:00 – 18:30 : 3×C, 3×I

→ Conference dinner & concert of 7'PO on Thursday at 19:00

7) Non-thermal mwl/multi-messenger data on SNRs – GWs, Neutrinos – Future facilities & perspectives

Friday, 09:00 – 10:30 : 3×C, 1×I & 11:00 – 12:30 : 3×C, 1×I & 14:00 – 17:30 : 6×C, 2×I

→ Bus excursion to the Volcano on Saturday (07:00-17:00)



Le Maïdo viewpoint (at above 2000 m in altitude):

Take a pullover and a bottle of water

Path of the Tamarinds (2.2 km [~1 h] long round/loop):

No need to have hiking shoes, but no sandals/slippers

- « **Bad** » news :

- Number of simultaneous connexions through the Wifi is limited to 40 (but the network *visiteurs-cg974* is password-free)
- No guide from ONF/PNRun available for the excursion to the Maïdo. I'll be acting as such a guide (but all the other social events are scheduled as expected)

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- **Miscellaneous news :**

- (Very) early breakfast at 6am (service until 6:30) on Wednesday the 22nd before departing for Le Maïdo at around 7am
- Check out your bag: two local products (vanilla and essential oil of geranium Bourbon) in a handmade pouch, USB key, notebook, leaflets



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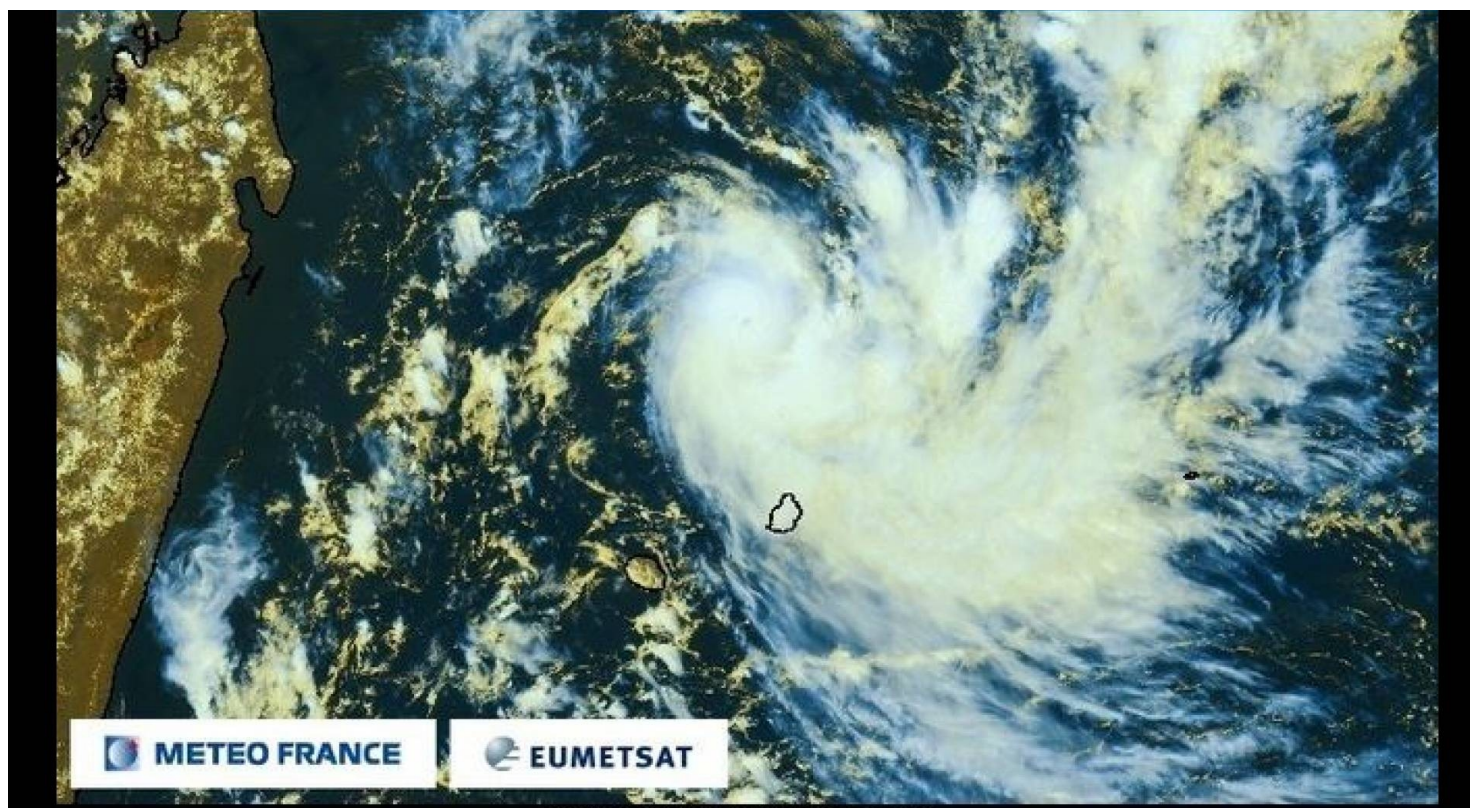
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- **Good news :**

- No tropical storm is expected for this week



**Tropical storm named « Carlos » passed
close to La Reunion on Feb. the 7th**



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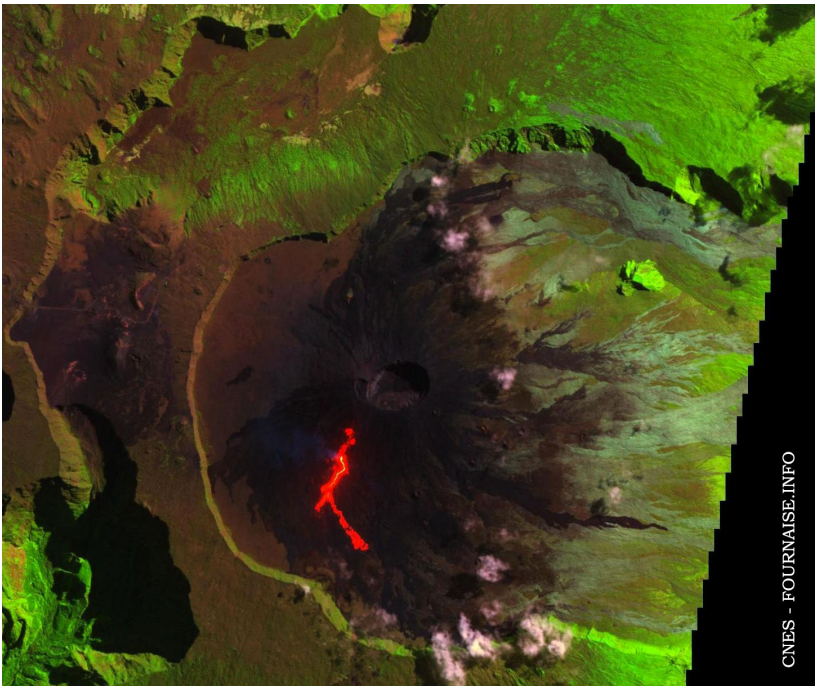
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- Piton de la Fournaise (Peak of the Furnace) is erupting since Jan. 31st



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- Piton de la Fournaise (Peak of the Furnace) is erupting since Jan. 31st
- Lagoon is just a stone throw away from there

« Solar fish » (© Bruce Cauvin)
in reference to the annular solar eclipse of 2016 Sep. 01

