

Conference Summary

#pragueflares

Lyndsay Fletcher

University of Glasgow

General impressions

High quality presentations & posters

Lots of discussion, questions

Meaningful solar-stellar interaction

Lots of enthusiastic young scientists

Minimal audience drop-off

Excellent organisation and conference support

Themes

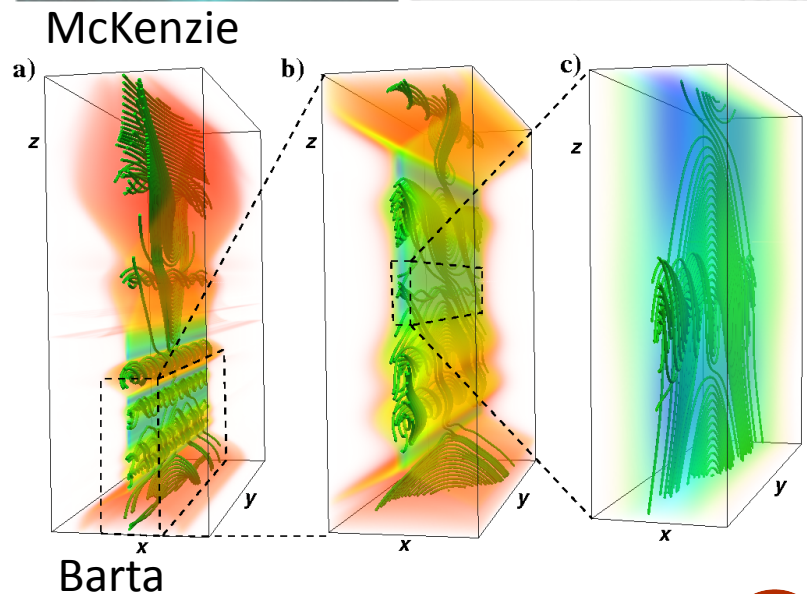
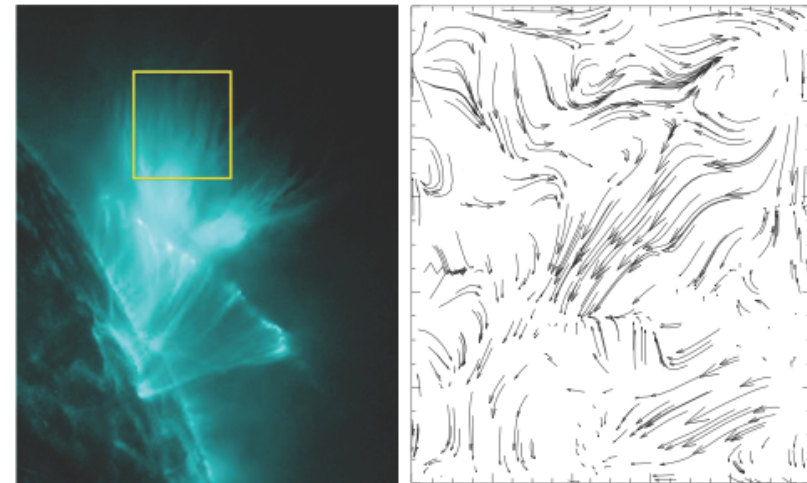
- Complexity
- Topology
- Plasma diagnostics
- 15 Feb 2011 & other well-observed flares
- Simulations as experiments
- Stellar flares push the boundaries

Complexity

Structures with internal tangling/turbulence:

Role in:

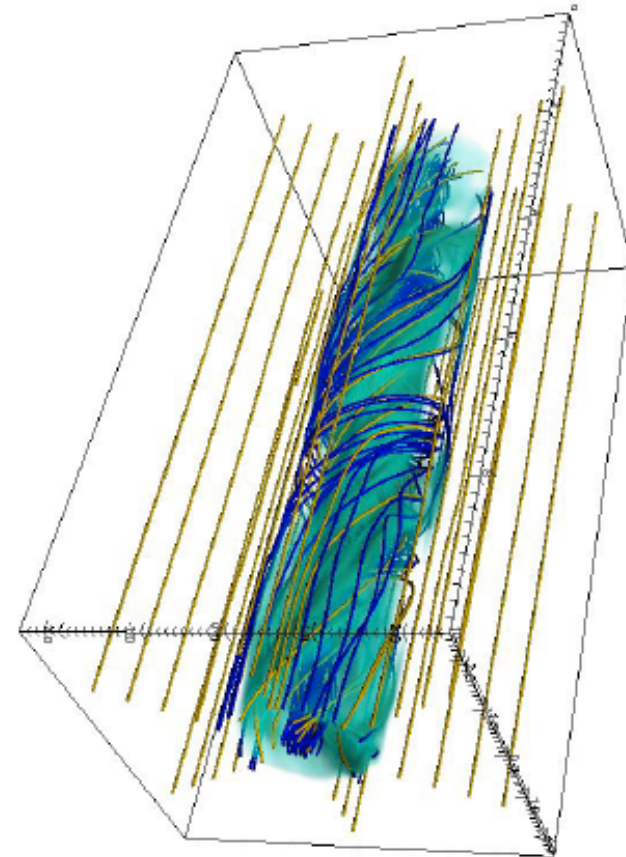
- Particle acceleration
- Energy storage
- Long-lasting energy release



Complexity in 'simple' flares

Most flares are not large, complex eruptive flares; most are small, 'simple', confined flares.

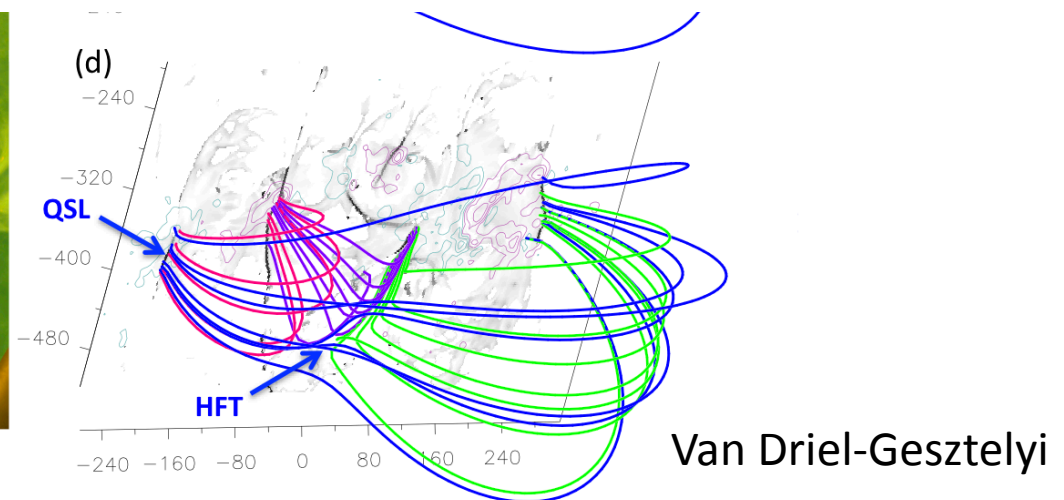
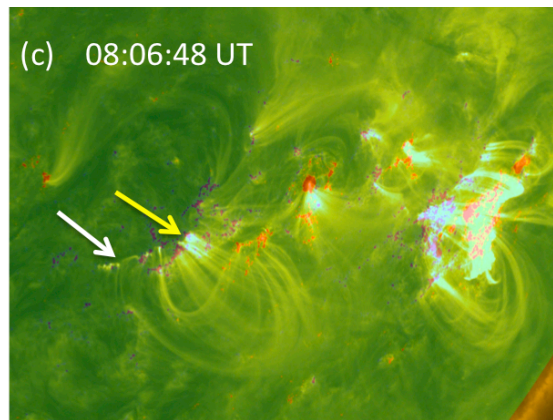
Internal twist thus particularly relevant in developing & releasing stresses.



Pinto

Topology

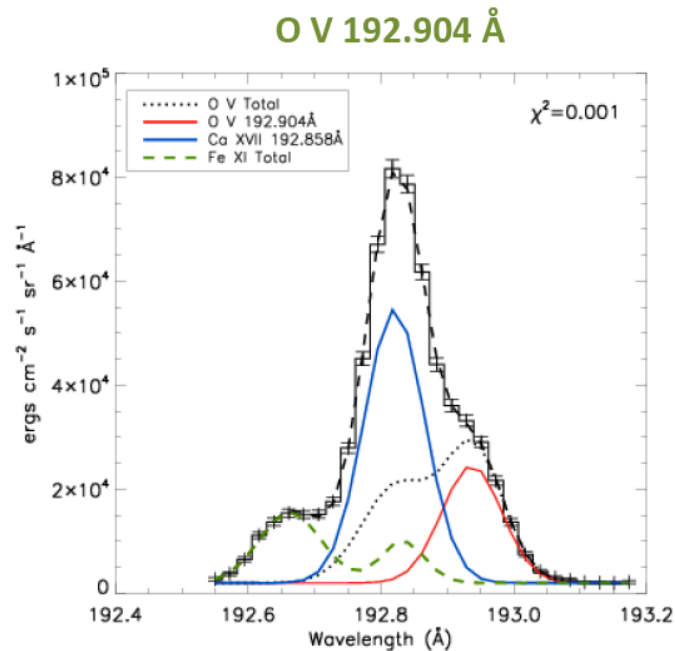
Importance of using topology to map evolution of flares is not in doubt.



Used fruitfully in even the most complex of events – and can illuminate subtle evolution.

- What next for such studies?

Diagnostics



Graham

Plasma diagnostics being used inventively to explore flare plasma conditions.

Includes 'older' ones revived by new instrumentation.

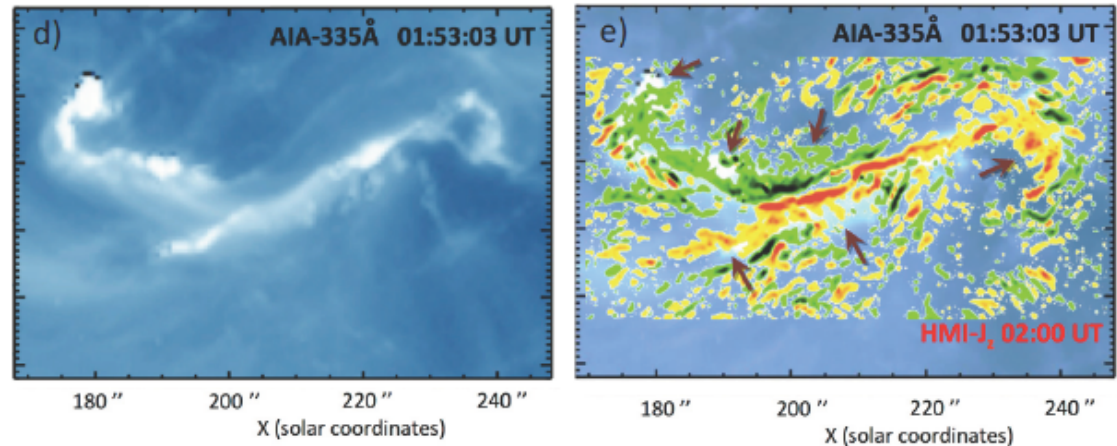
Also exciting; investigation of non-equilibrium plasma distributions in diagnostics from optical - XR

15th Feb 2011

(and other well-observed flares)

Janvier

Much discussion on
15th Feb 2011:
> 30 papers written
on this event!



We need a synthesis of all these results

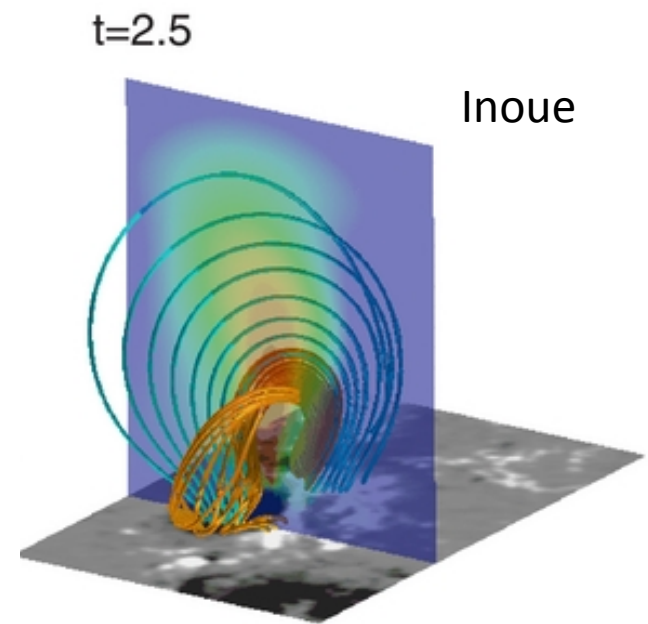
The same is sure to happen with 29th March 2014
– co-ordinate analysis from the outset?

Simulations as experiments

“We need quantitative analysis of numerical experiments”

Simulations - MHD and radiation-hydro - can be used for more than explaining individual events.

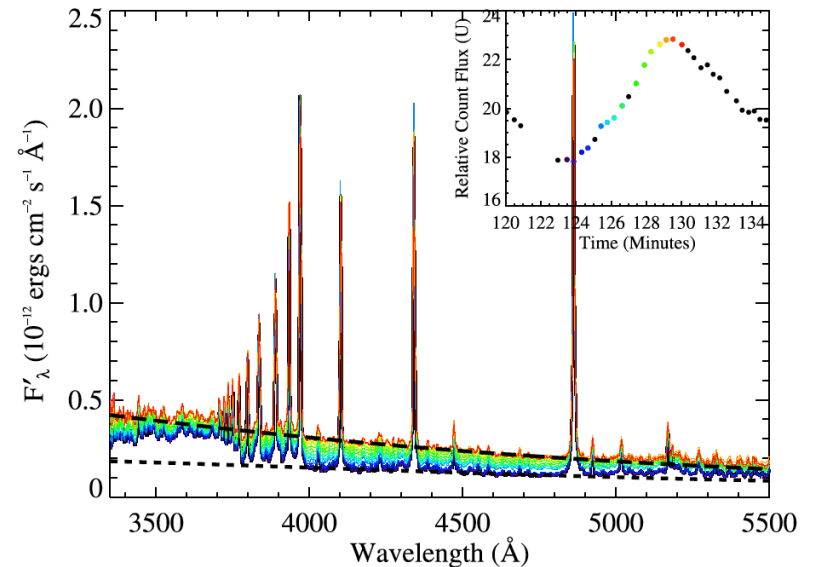
Simulations are costly: need to dig into them to fully explore the physics.



Stellar flares push the boundaries

“Why get so complicated”

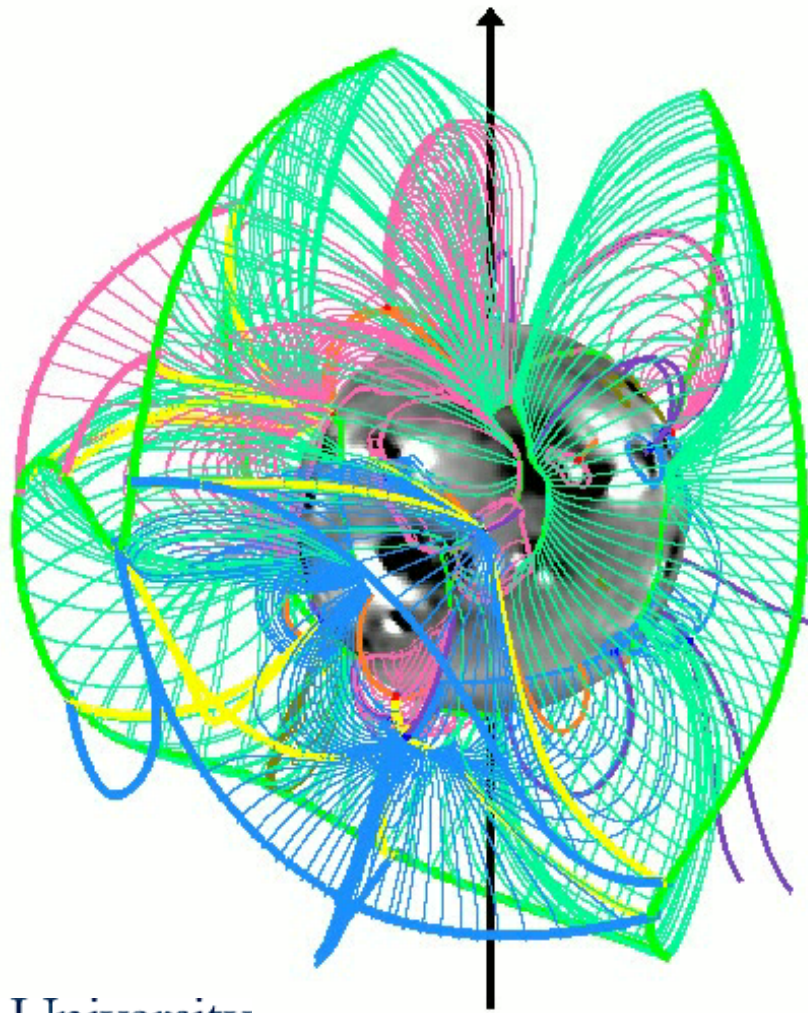
Extreme conditions in stellar flares force consideration of physics not usually included in solar cases



Kowalski

Stellar flaring behaviour across stellar classes may also illuminate basics – e.g. reconnection regimes

Best graphic?



The Sun:
100% topology

Also – best neologisms?
- Separatrix caves &
tunnels

Parnell

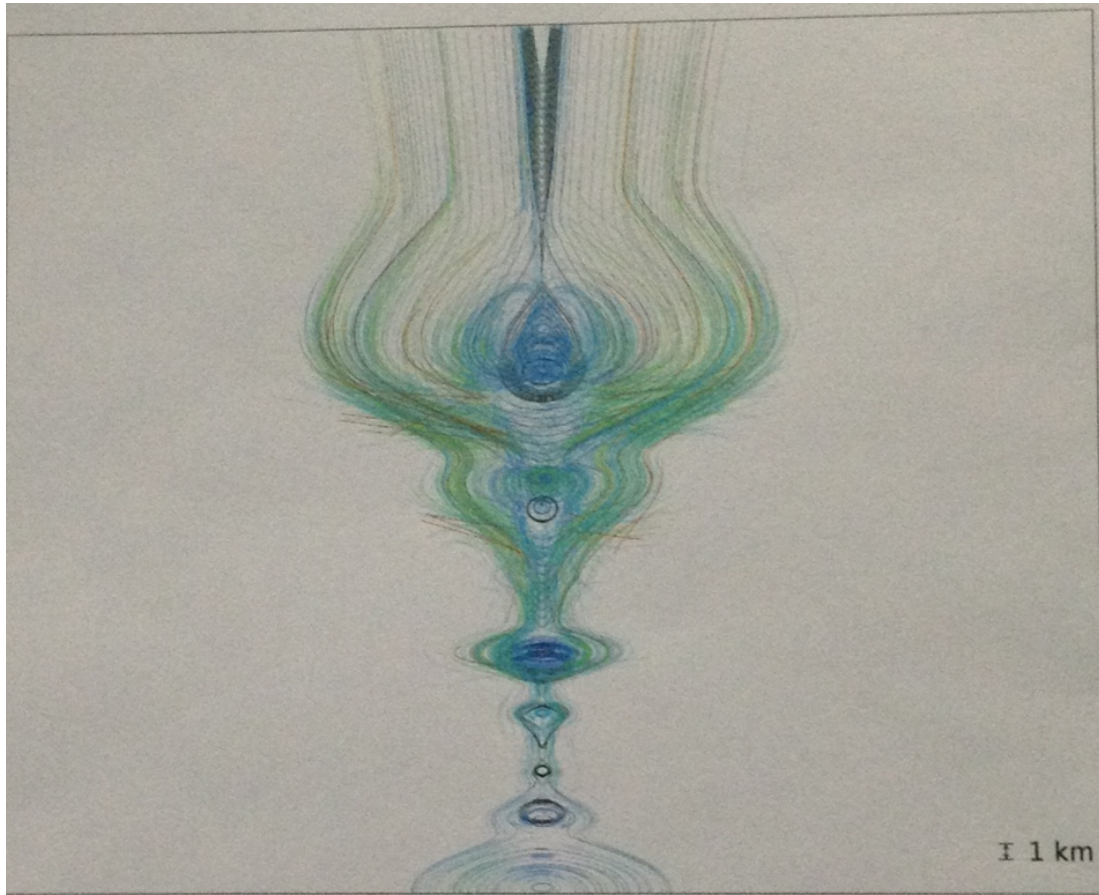
Best graphic?

Pinto



Umbilical cord...

Best graphic?

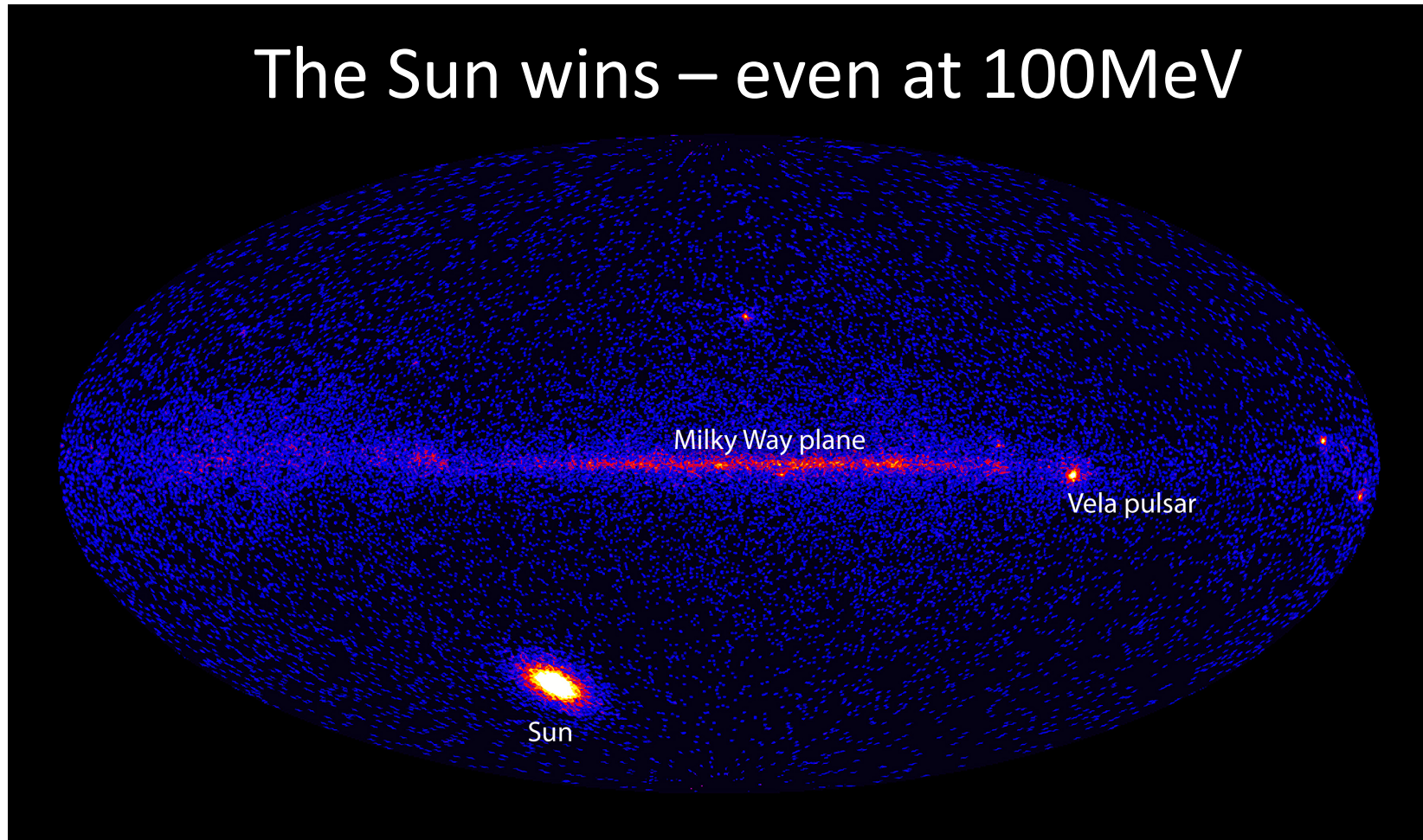


A nice glass
of wine

Kramolis

Best graphic?

The Sun wins – even at 100MeV



Petrosian

Random statistics

Questions per talk = 2.2

Macs:PCs = 55:45

Attendance morning after conf. dinner = 70%

Badges - wearers:non-wearers (26/6/14) = 68:1

Topical Issue in Solar Physics:

“Solar and Stellar Flares: Observations, Modeling and Synergies”

- Guest Editors: Petr Heinzel and Lyndsay Fletcher
- Submission deadline: 1 December 2014
- But: please **send an LOI** to the Guest Editors by **1 October!**
- Submission via:
<https://www.editorialmanager.com/sola/>
- Choose article type: TI: Solar and stellar flares.
- TI is NOT a conference proceedings!
 - please submit only new, original results unpublished elsewhere;
 - exception: invited reviews, however, they should contain new synthesis of previously published results;
 - no page limit, but please be concise – too long articles are less read!
 - fully refereed, of course.
- Each article will be published online 4-6 weeks after its acceptance, and then will be published in the Journal’s special issue, which will be made into a hard-cover book, which will be distributed to all the participant of this conference.
- There is no obligation to submit a manuscript to the TI even if you gave an invited review, a contributed talk or presented a poster. *However, original new results on flares, not presented at the meeting, can be submitted.*

Thanks

Conference organising team (CBT)

Conference sponsors

Audio-visual team

Catering staff

And of course the LOC: František Fárník (chair)
Petr Heinzl, Jana Kašparová, Michal Varady &
Zina Pecková (CBT)