



# FP7 HELCATS

Heliospheric Cataloguing,  
Analysis and Techniques Service

Kick-off Meeting: Overview & WP1  
Richard Harrison



# Overview

- Congratulations – we did it!
- What have we signed up to?
- What next?

*Thanks, Jackie!*



FP7 HELCATS  
Heliospheric Cataloguing, Analysis and Techniques Service



# Overview

“... a strategic programme that aims to empower the wider scientific community, in Europe and beyond, by providing access to advanced catalogues - validated and augmented through the use of techniques and models - for the analysis of solar wind transients, based on observations from European-led space instrumentation.”

Coordinating studies of the transients in the heliosphere as never before!

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# Aims of HELCATS

- Catalogue transient (CMEs) and background (SIRs/CIRs) features imaged by STEREO/HI, including
- Kinematic properties estimated using a variety of established & prototype modelling approaches
  - geometrical modelling
  - forward and inverse modelling
  - automatic detection
- Verify these kinematic properties through comparison with solar source observations and in-situ
- Assess the potential for initialising MHD models with both the transient & background solar wind structures observed by HI
- Assess the complementarity of using radio obs (in particular Type II radio bursts and IPS) in combination with HI.

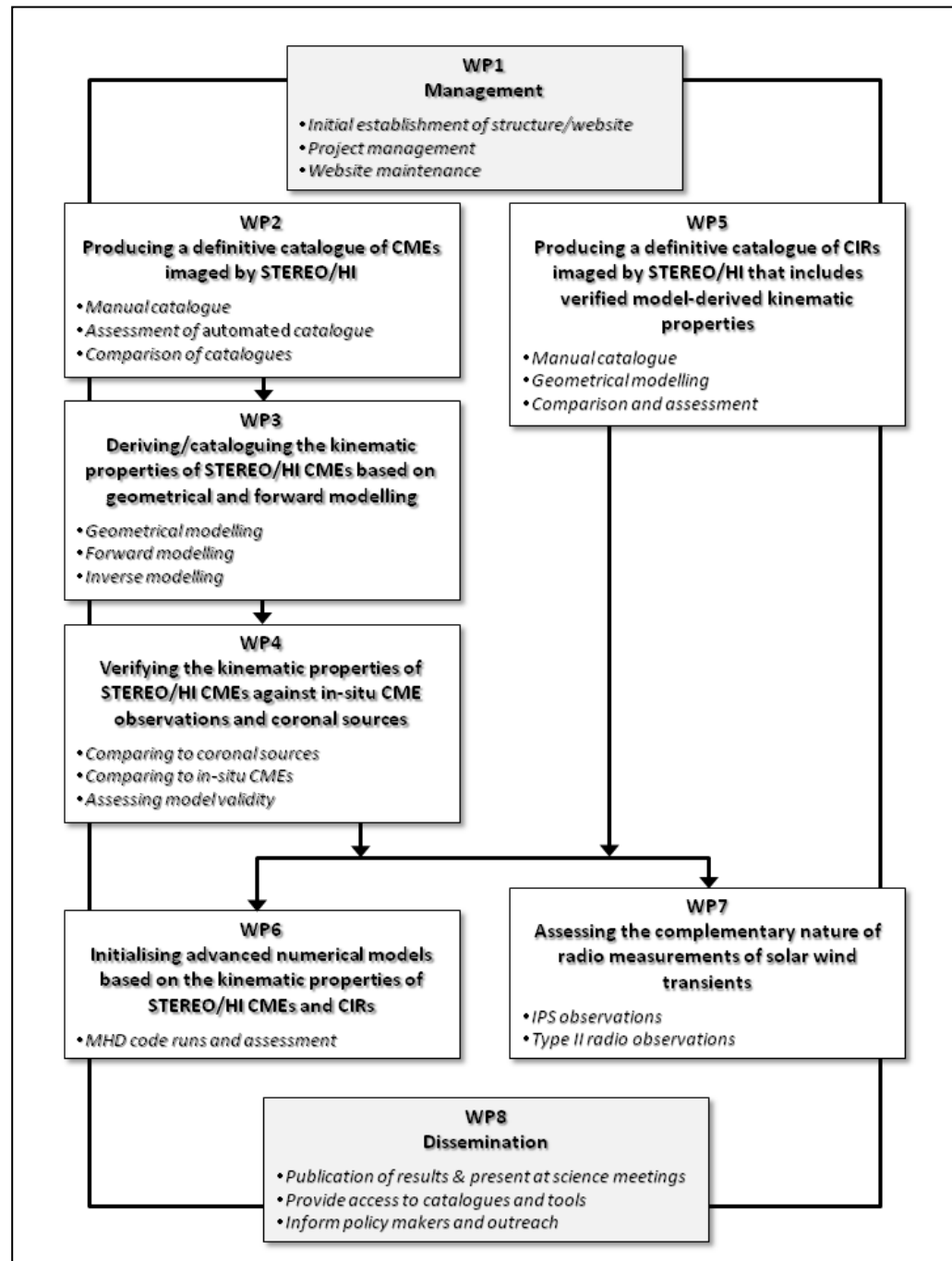


# The Team

- STFC-RAL Space, UK
  - University of Graz, Austria
  - University Paul Sabatier/CNRS, France
  - University of Göttingen, Germany
  - Royal Observatory Belgium, Belgium
  - Imperial College London, UK
  - University of Helsinki, Finland
  - Trinity College Dublin, Ireland
  - George Mason University, USA
- R. Harrison/J.A. Davies  
C. Möstl  
A.P. Rouillard  
V. Bothmer  
L. Rodriguez  
J.P. Eastwood  
E.K.J. Kilpua  
P. Gallagher  
D. Odstrčil



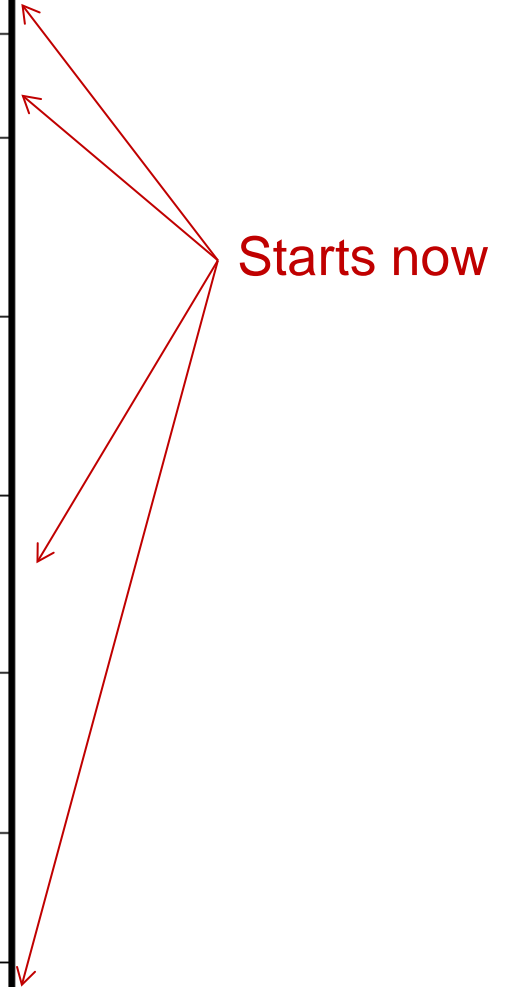
# The WP Structure





# WP Structure

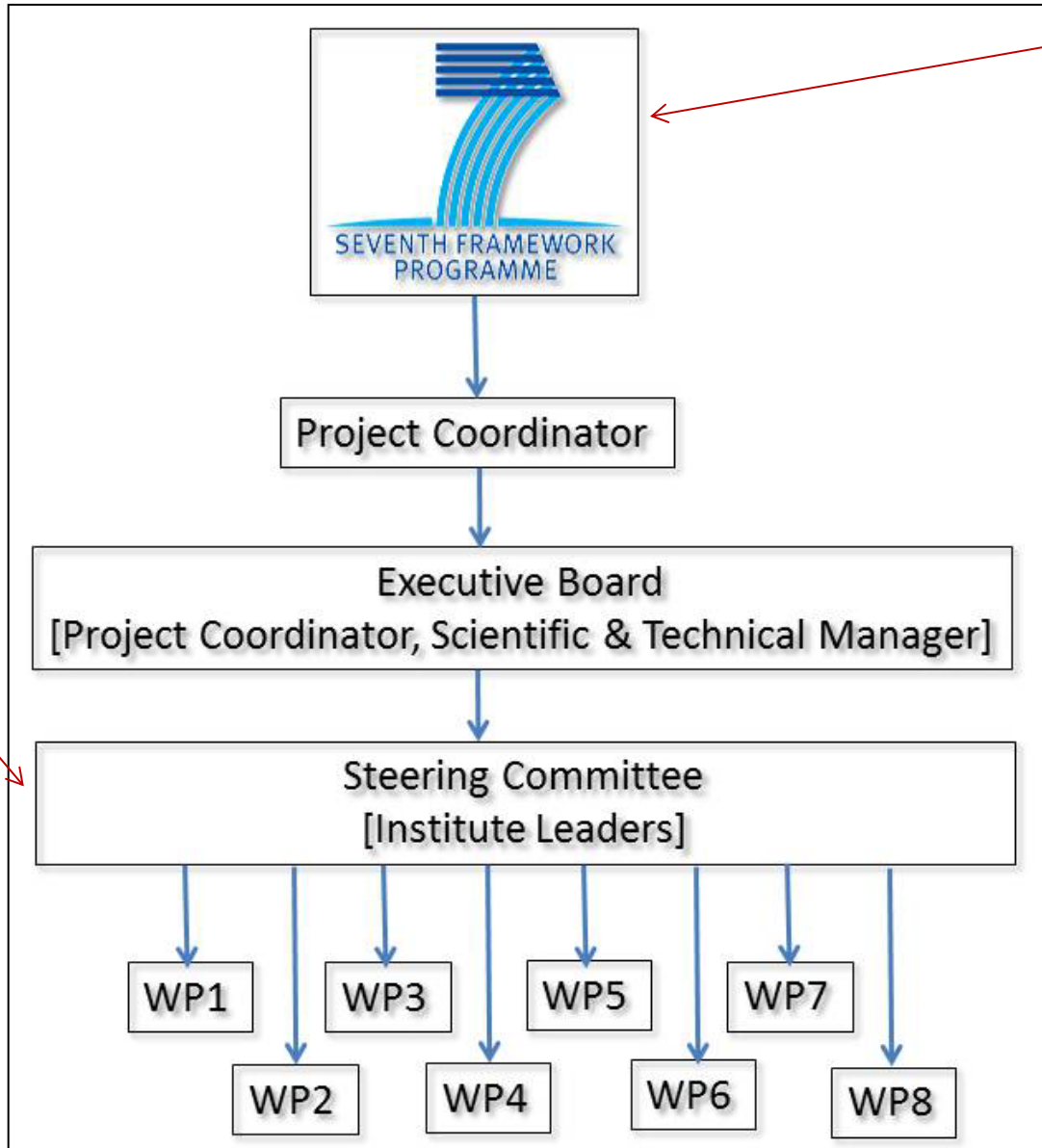
Work package No.	Work package title	Type of activity	Lead beneficiary No.	Lead beneficiary short name	Person months	Start month	End month
WP1	Management	MGT	1	STFC	8.5	1	36
WP2	Producing a definitive catalogue of CMEs imaged by STEREO/HI	RTD	1	STFC	51.5	1	36
WP3	Deriving/cataloguing the kinematic properties of STEREO/HI CMEs based on geometrical and forward modelling	RTD	4	UGOE	51	7	36
WP4	Verifying the kinematic properties of STEREO/HI CMEs against in-situ CME observations and coronal sources	RTD	2	UNIGRAZ	68	10	36
WP5	Producing a definitive catalogue of CIRs imaged by STEREO/HI that includes verified model-derived kinematic properties	RTD	3	UPS	42	1	36
WP6	Initialising advanced numerical models based on the kinematic properties of STEREO/HI CMEs and CIRs	RTD	3	UPS	27	7	36
WP7	Assessing the complementary nature of radio measurements of solar wind transients	RTD	6	IMPERIAL	39.5	10	36
WP8	Dissemination	OTHER	1	STFC	21.5	1	36
TOTAL					308		





# Management

EU Project Officer – Sabri Mekaoui



Includes all institute leads and WP leads





# Meetings/Reviews

Month	Meeting/Review	Comments
1 ( <i>May 14</i> )	Kick-off meeting	2-day meeting; all institutes
1+	Monthly telecons	EB & SC
6 ( <i>Oct 14</i> )	Bi-annual project meeting/workshop	2-day meeting – EB & SC
6	Intermediate technical review	Assoc. with above; attended by PO
12 ( <i>May 15</i> )	Bi-annual project meeting/workshop	2-day meeting – EB & SC
12	Intermediate technical review	Assoc. with above; attended by PO
12	Annual Open Workshop	2-day meeting open to community
18 ( <i>Oct 15</i> )	Bi-annual project meeting/workshop	2-day meeting – EB & SC
18	Intermediate technical review	Assoc. with above; attended by PO
18	Finance report & technical report	Formal reports to REA

*EB = Exec Board; SC = Steering Committee; PO = Project Officer*

**Action: We need to fix dates/locations/arrangements for first 6 months**



# Deliverables

First six months and on-going deliverables  
(WP 1, 2, 5 and 8)

No.	Deliverable	WP	Lead	Delivery date
D1.2	Minutes of kick-off meeting	1	RAL	Month 2: June 2014
D1.1	Website launch	1	RAL	Month 3; July 2014
D1.3	Progress report to Commission	1	RAL	Month 7: Nov 2014
D2.1	Catalogue: HI CMEs (manual)	2	RAL	Month 36 – on-going
D2.5	Scientific management of project	2	RAL	Month 36 – on-going
D5.1	Catalogue: Online CIR	5	UPS	Month 12 – on-going
D8.*	Dissemination (on-going) actions, including: posting on website, publications, science meetings, press releases	8	RAL	Month 36 – on-going



# Headline Actions

i.e. items to sort now...

- Make arrangements for the meetings/reports/telecons for the first six months
- WP leads to review and oversee the deliverables in their areas
- Embark on the listed actions for the WPs starting in month 1
- General discussion (tomorrow) on key issues to be addressed at the start

