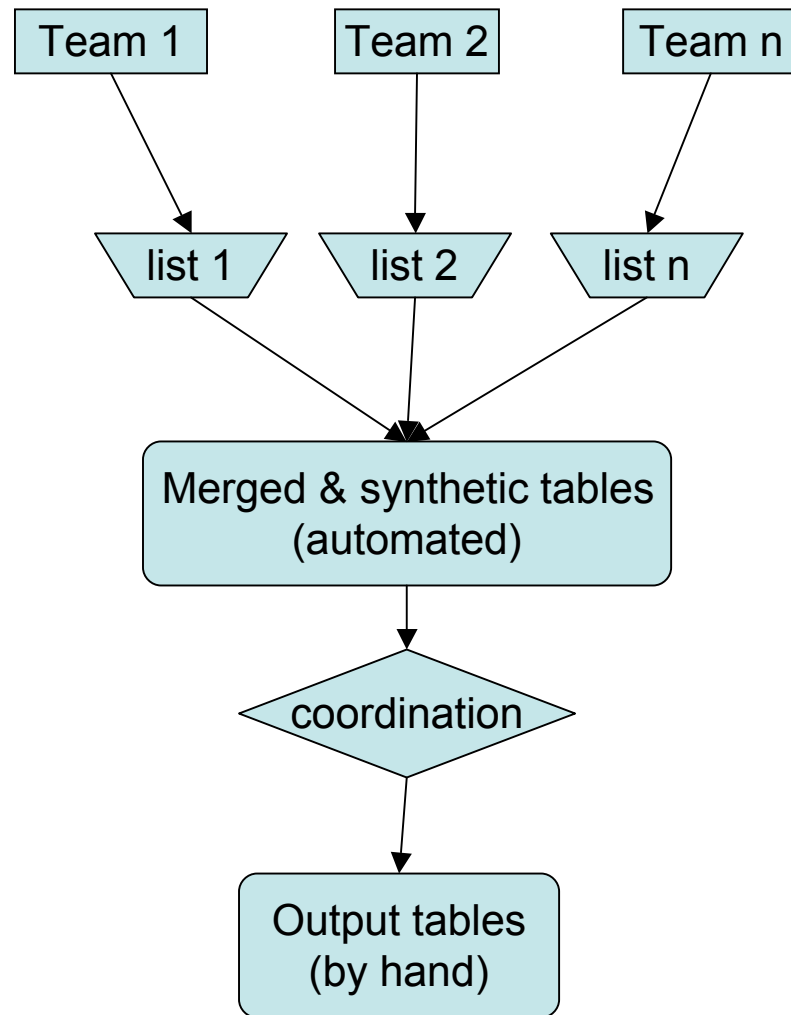


Organization of the detection group



- Detection teams
 - (7 different teams identified)
- Lists
 - (tables with common ranking)
- Coordination
 - Case by case discussion
 - det-coordinator: one by run
 - Teleconf (every 1-2 weeks)
 - During CEST meeting
- Output:
 - Tables updated by coord
 - Information summary for FU

Ranking of the candidates

Detection tables (filled up by each detection team)

- Rank 1: secure detection (periodic & well shaped transits - possible planet)
- Rank 2: periodic event with bad shape or small transit number)
- Rank 3: periodic event - suspected EB
- Rank B: clearly identified EB (bottom of the list)

Output tables (filled up by the run coordinator)

- P1: highest priority - good candidate
- P2: lower priority - correct candidate
- P3: low priority but possibly merits FU
- P4: should be removed from the list

Recapitulative table (wiki front page)

Transit-Candidates

Run	Status	--- Alarms --- LAM/RoiA	--- Detection --- DetPage	coord-det	--- Follow-Up --- PhotPage - DopPage	coord-fu	Confirmed Planets
IRa01	released	Merged in FU table	TableOutIra01	S.Carpano	FU - IRa01 Update:25/09/08	C.Moutou	E2_1126; E1_0330
LRc01	released	AlarmLrc01	TableOutLrc01	J. Cabrera	OnGoingFU-LRc01	M.Fridlund	E2_0192; E1_0523
SRc01	released	-	TableOutSrc01	S. Renner /S.Carpano	FuSrc01	A.Erikson	
LRa01	released	AlarmLRa01	TableOutLra01 Update:25/09/08	L.Carone	TBD	A.Hatzes	E1_1031; E2_0165??
SRa01	released	-	TableOutSra01	F.Pont	TBD	S.Aigrain	
LRc02	on/alarm	AlarmLRc02					E1_0632
SRc02							
SRa02							
LRa02							

(Easy access to the information)

Exemple of output table

P	CoRoT-Id	Win-Id	Epoch	Period	DF/F	Total Duration	Rank	Sha	Det group comments	FU feedback	Link to plots	magnitude
			(HJD)	(d)	(%)	(h)	123B	UVS				
1	0102671819	E2_3459	2454398.62575	2.828	1.628	1.4-2.77	4100	U		In FU, Phot: No potential BEB nearby	Ludmila's prel. plot	15.211
1	0102582529	E2_5756	2454399.72057	15.842	2.722	1.8-4.72	3200	U		In FU	Ludmila's prel. plot	15.963
1	0102590008	E2_4129	2454398.24571	1.94	0.175	2.02	1200	V			Roi's plot ; Ludmila's prel. plot	15.395
1	0102590741	E2_2694	2454418.36094	30.385	0.776	6.1-9.74	1200	U		In FU	Ludmilas prel. plot	13.42
1	0102692038	E1_4353	2454401.96117	5.225	1.09	4.372	1100	U	large noise (only found by two detection teams)	already in the FU, probable BEB from photometry?	Ludmila's prel. plot	15.521
1	0102753331	E2_5747	-	19.75	3.3	11.8-8.8	3001	U			Ludmila's prel. plots	15.868
1	0102708694	E2_0165	2454398.07582*	0.8536	0.03	1-1.422	1100	V		in FU		
1	0102779966	E2_5184	2454399.49123*	7.369	0.41	1.3-2.8	1100	?		in FU		
1	0102764809	E1_1031	2454400.19444	4.037	1.085	2.062	2100	U		Planet	Ludmila's prel. plots	13.76
2	0102777869	E1_5015	2454405.89953	13.7	0.995	10.1	2200	U	large noise, duration quite long		Roi's plot ; Ludmila's prel. plots	15.743
2	0102670085	E1_5536	2454398.54804781	0.899	0.27	1.54	1100	V	large noise (only found by two detection teams, Luth, Kohln), quite long		Rois plot; Ludmila's prel. plot	15.835

Score from the detection teams

Runs detections	IRa01	SRc01	LRc01	SRa01	LRa01	LRc02
>2 teams	24	21	20		21	
1 team	17	40	11		61	
Output	3xP1 13xP2 3xP3 3xP4	4xP1 17xP2 23xP3 3xP4	7xP1 8xP2 15xP3		9xP1 10xP2 8xP3	
Planets	2 (alarms)	0	2 (alarms)		1+1? (alarms)	1 (alarm)

FourthBlindTest



A Blind Test in two steps

This test is based on simulated light curves obtained in the following way:

- The basic material are true CoRoT data from a run recently released, LRa01 (data are N2 data issued from the last version of the pipeline with jitter correction)
- Various kind of simulated transits are included in the data (from Jupiter to Earth size planets)

The goal of this blind test is to learn about the detection capacity of the various filtering/detection tools used in our group when placed in realistic conditions. Two different tests are proposed to explore our detection capacities.

- **Test in magnitude - BT4a:** Transit signals are included for different magnitude ranges; five magnitude range have been selected ($mv < 12$, 12-13, 13-14, 14-15, $mv > 15$). The number of stars in each bin is equal to 50 (250 LCs for the whole sample).

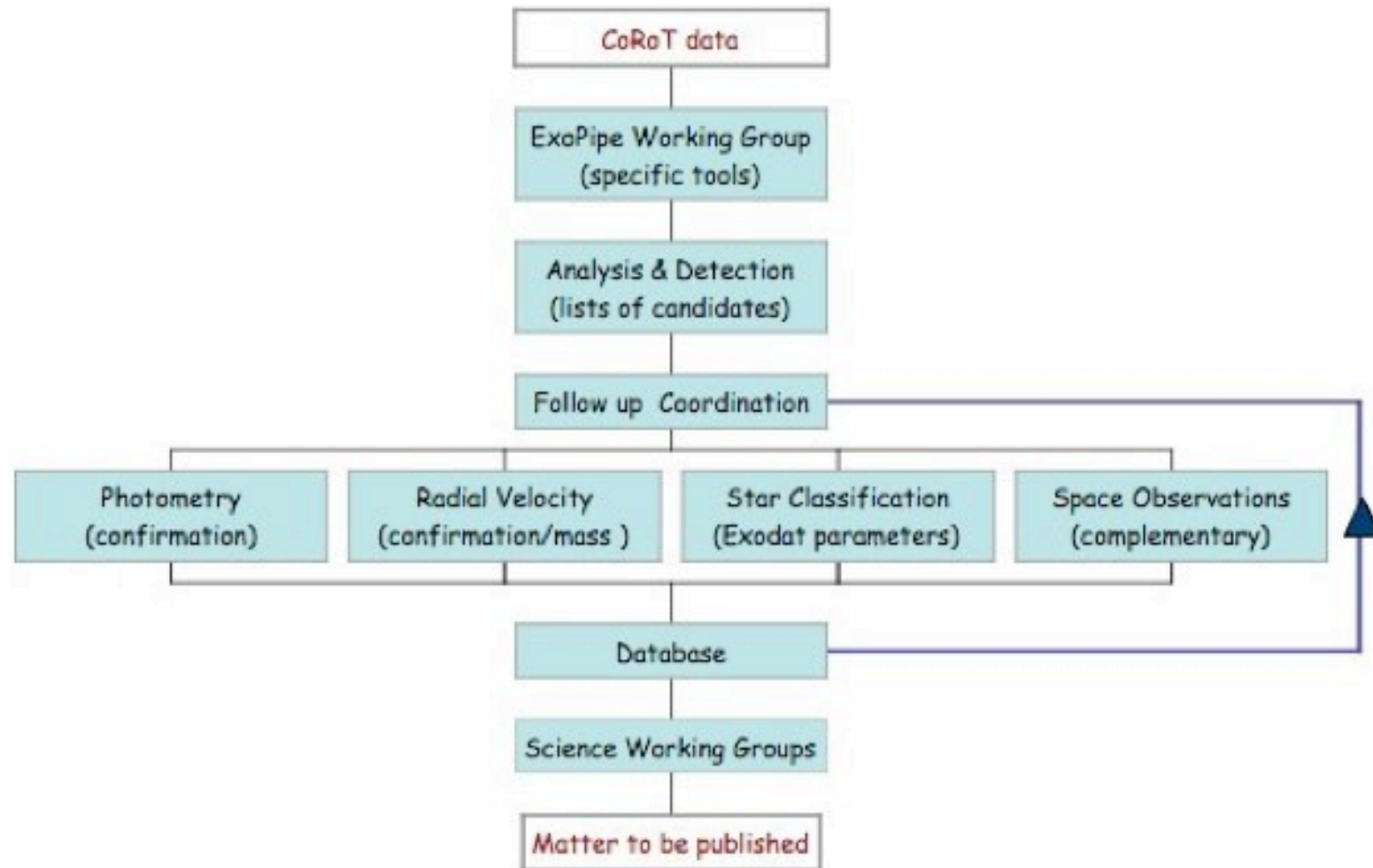
The package containing the LCs for BT4a (step 1) can be found here: [BT4a_fits.tgz](#)

- **Test in transit depth - BT4b:** The LC of a single star with $13 < mv < 14$ is selected in LRa01 and various transit signals are included corresponding to a planet size that ranges from 1 jupiter radius to 1 Earth radius. 100 light-curves are produced in this way with some of them containing a planet and other not. The goal is here to build up two curves: the probabilities of detection and false alarm as a function of planet radius.

The package containing the LCs for BT4b (step 2) is TBD. .

Note: Eclipsing binaries are not included in the test Transit signals were not included in a realistic way in the 3 colored channels. *These samples of simulated light curves were performed at LAM by Pierre-Yves Chabaud.*

CEST General Organisation



. # The arrow simply indicates that the "coordination group" will have a direct access to the information stored in the database as to take the most appropriate decisions on the F-Up.