

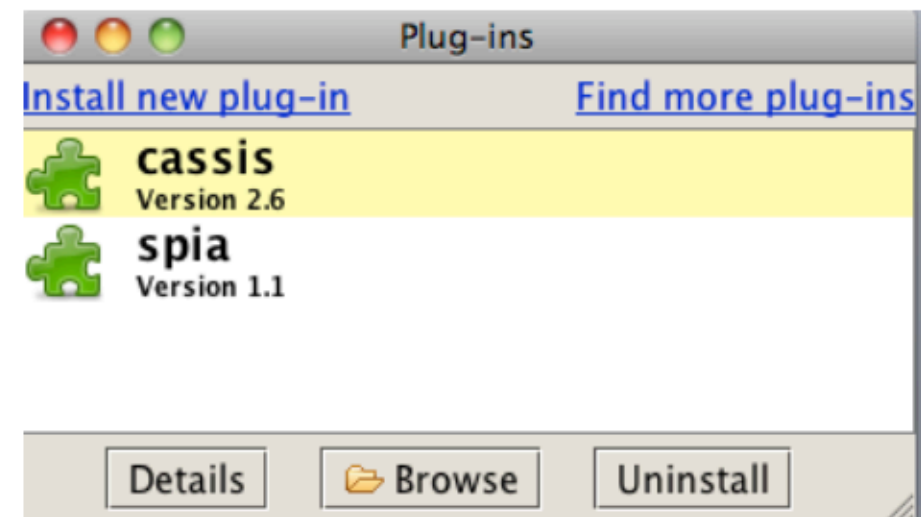
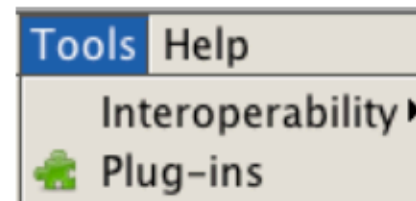
# SPIRE Specific Setup

Chris Pearson  
On behalf of the SPIRE-ICC

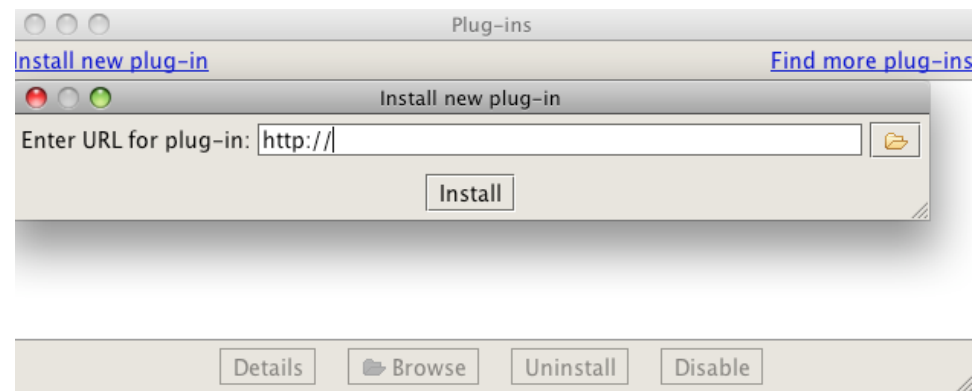
Person	Institute	Person	Institute
<b>PHOTOMETER</b>		<b>SPECTROMETER</b>	
Chris Pearson	RAL, UK Lethbridge, Canada	Ed Polehampton	RAL, UK Lethbridge, Canada
Brian O'Halloran	Imperial, UK	Nanyao Lu	IPAC, USA
Luca Conversi	ESAC, Spain	Ivan Valchanov	ESAC, Spain
		Dominique Benielli	Marseille, France
		Anne-Laure Mealier	Marseille, France

- HIPE version v.6.0.3
- Plug ins
- Local Store
- Data
- Calibration Files
- HIFI Data
- Scripts

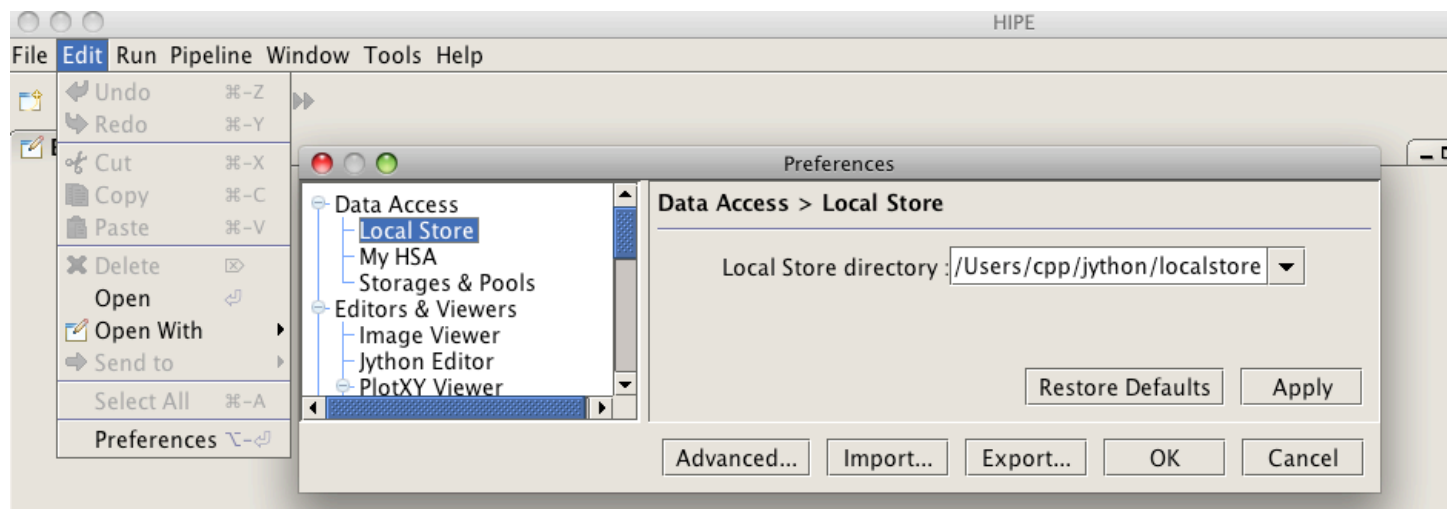
- Plug-ins are add-on software for HIPE, provided from and maintained elsewhere
  - Install once, use in all HIPE versions
  - SPIA Plug-in: Photometry interactive analysis (Friday)
  - CASSIS: Spectral analysis (Thursday)



- Install HIPE plugin for SPIRE
- Photometer Interactive Analysis (SPIA)
  1. Start up HIPE
  2. Open Tools -> Plug-ins and select “Install new plug-in”
  3. Delete the http:// and paste in this URL:  
`https://nhscsci.ipac.caltech.edu/spire/DPsoftware/spia/scripts/spia_1.2.jar`
  4. Click the “Install” button.
  5. Now the message “Plug-in installed correctly” should pop up.  
(If not, please check theURL.).
  6. Click “OK”
  7. Restart HIPE



- Your **local pool** containing all your data for HIPE processing should be stored in the **Istore** directory
- Defaults
  - Mac `/Users/{userid}/.hcss/Istore`
  - Linux `/home/{userid}/.hcss/Istore`
  - Win `C:\Documents and Settings\{userid}/.hcss/Istore`
- Default can be changed from HIPE from the **Edit -> Preferences -> Local Store** menu



- Data is available via ftp from [ftp://ftp.sciops.esa.int/pub/hsc\\_wshop/](ftp://ftp.sciops.esa.int/pub/hsc_wshop/)
- Data is in the form of tar gzip **HIFE pool** format
- SPIRE pools are summarized in a pdf handout
- Before use, the pools need to be unpacked
- We provide unpacking script on the web

- Edit location of your tgz files for your environment
- Should automatically pick up your lstore
- Get calibration files
- Comment out any data pools you have not got or do not want to decompress
- Get the HIFI data for joint session

```

12
13 # Define the directory where the .tgz files are located. The syntax
14 # depends on the operating system. Do not forget the trailing slash.
15 #
16 # For Mac and Linux it would be something like
17 #data_directory = "/Users/cpp/Downloads/"
18 #
19 # and for Windows, you will need double back-slashes for paths specified at the
20 # command line, for example
21 data_directory = "C:\\Users\\etp87\\downloads\\"
22
23 # Decompress and unpack the .tgz files into 'lstore' area on disk
24 #
25 # Get the location of the lstore directory from the Hipe property:
26 lstore_dir = Configuration.getProperty('hcss.ia.pal.pool.lstore.dir')
27 print lstore_dir
28
29 # Calibration tree (needed for both photometer and spectrometer demos)
30 decompress(archive=data_directory+'spire_cal_6_1.tgz', dirout=lstore_dir)
31
32 # SPIRE photometer data
33 decompress(archive=data_directory+"spirephot_bd303639.tgz", dirout=lstore_dir)
34 decompress(archive=data_directory+"spirephot_dark_od587.tgz", dirout=lstore_dir)
35 decompress(archive=data_directory+"spirephot_gammadra_rp.tgz", dirout=lstore_dir)
36 decompress(archive=data_directory+"spirephot_neptune_beams_rp.tgz", dirout=lstore_dir)
37 decompress(archive=data_directory+"spirephot_ngc5315_rp.tgz", dirout=lstore_dir)
38 decompress(archive=data_directory+"spirephot_ngc6946_orth_rp.tgz", dirout=lstore_dir)
39 decompress(archive=data_directory+"spirephot_ngc6946_nom_rp.tgz", dirout=lstore_dir)
40
41 # SPIRE spectrometer data
42 decompress(archive=data_directory+"spireSpec1342189124_NGC7027.tgz", dirout=lstore_dir)
43 decompress(archive=data_directory+"spireSpec1342189120_DarkSky.tgz", dirout=lstore_dir)
44 decompress(archive=data_directory+"spireSpec1342187893_Mrk231.tgz", dirout=lstore_dir)
45 decompress(archive=data_directory+"spireSpec1342187890_DarkSky.tgz", dirout=lstore_dir)
46 decompress(archive=data_directory+"spireSpec1342192180_NGC7023.tgz", dirout=lstore_dir)
47
48 # HIFI data for joint HIFI-SPIRE session
49 decompress(archive=data_directory+"1342205474_map_dbs_1b.tgz", dirout=lstore_dir)
50
51 print "Unpacking of files finished"
52

```



- Note: **Calibration Tree** is in the spectrometer ftp directory  
spire\_cal\_6\_1.tgz
- Photometer users also **need to download** this calibration tree

- Note: Spectrometer users will need to download the HIFI dataset

1342205474\_map\_dbs\_1b.tgz

for the joint session on Spectral Tools  
(Thursday)

- SPIRE scripts downloaded from workshop website;
  - `tgzfiles_to_lstore_spire.py`  
(script to unpack data pools)
  - `OT1_Workshop_SPHOT_combine_obs.py`  
(merge 2 maps together)
  - `OT1_Workshop_SPHOT_remove_glitches`  
(example glitch removal script)
  - `SPIRE_photometer_baseline.py`  
(example baseline removal script)
  - `SPIRE_Photometry_GammaDra.py`  
(example of photometry)
  - `SpireSpectrumFitterDemo.py`  
(script for spectral line fitting)
  - `spirelines.dat`  
(list of lines used for spectral line fitting)