

IVOA Madrid, 19-23 May 2014

Outreach of the European ARCHES project

(Astronomical Resource Cross-matching for High Energy Studies)

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Education session
23 May 2014

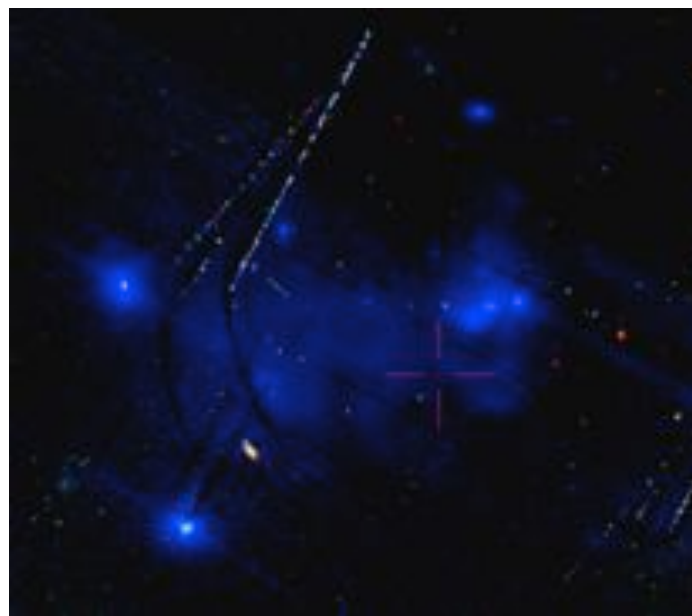


ARCHES



Outreach of the European project ARCHES (FP7)

- **Coloured image of the X-Ray sky**
 - Initiated in the frame of the SSC and finalized in the frame of ARCHES
 - Visible from the Aladin standalone application or from a Web page (Aladin Lite)
- **False colour Arches Sky**
 - One colour per energy band
 - Restricted to the enhanced catalogue coverage



Center of our Galaxy seen the XMM-Newton PN camera

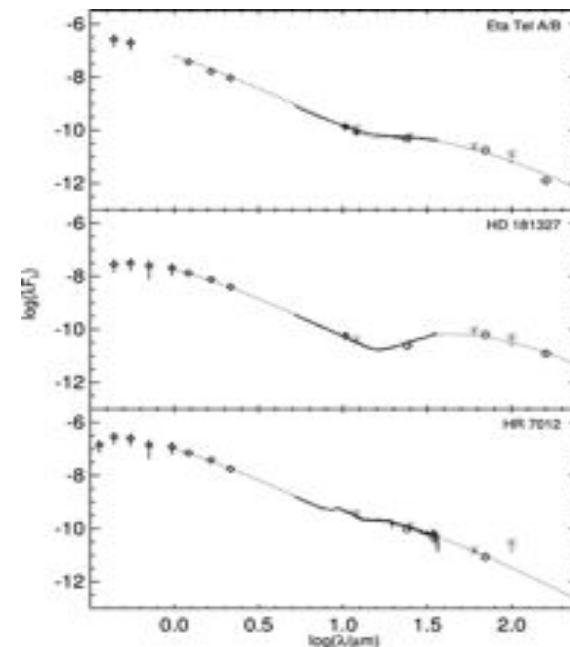
Outreach of the European project ARCHES (FP7) (2)

- **Goals**

- Promoting XMM results for a wide audience
- Making SEDs attractive (challenging)

- **Targets**

- Kids
- General audience
- Students



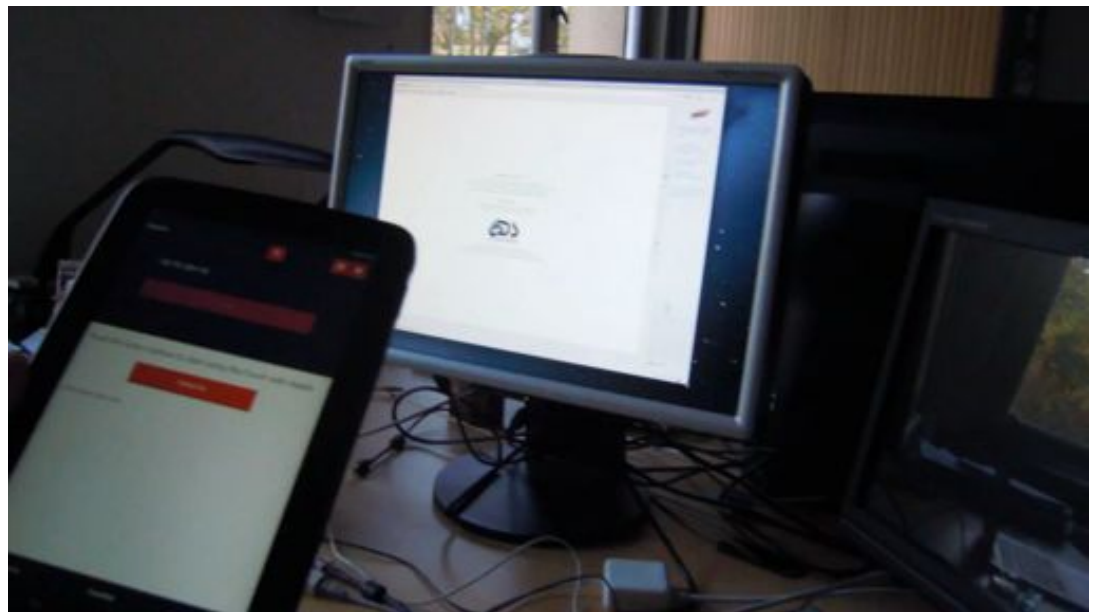
- **The activities are scoped to fit with available resources and expertise**



Previous work

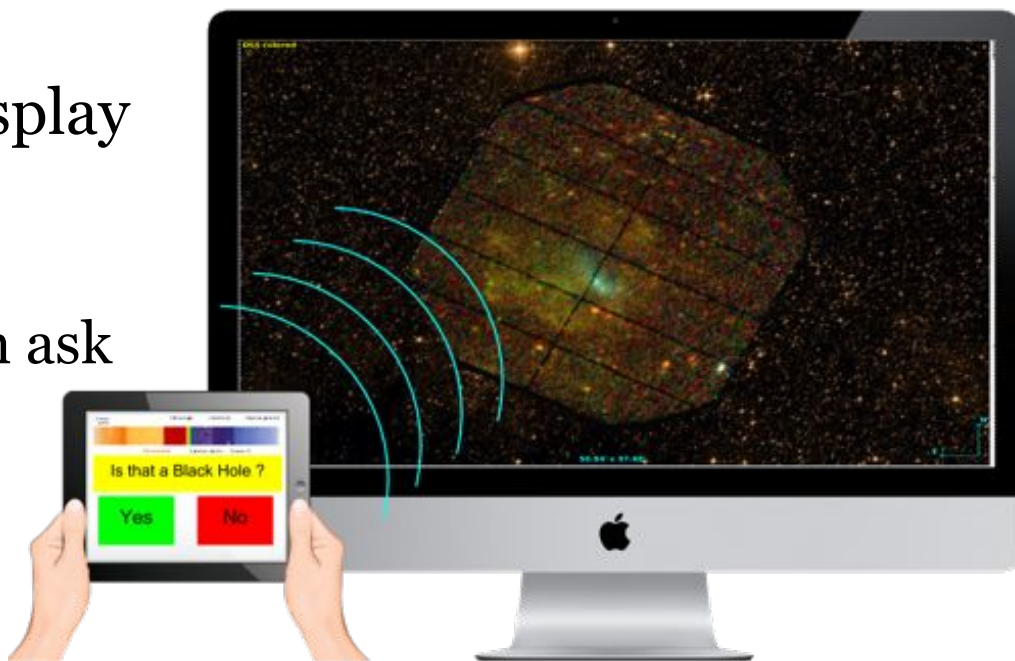
- SkyTouch, a remote control of Aladin through SAMP shown in CoSADIE TechForum 2 and during the Hawaii interop at the App session

Proof of Concept

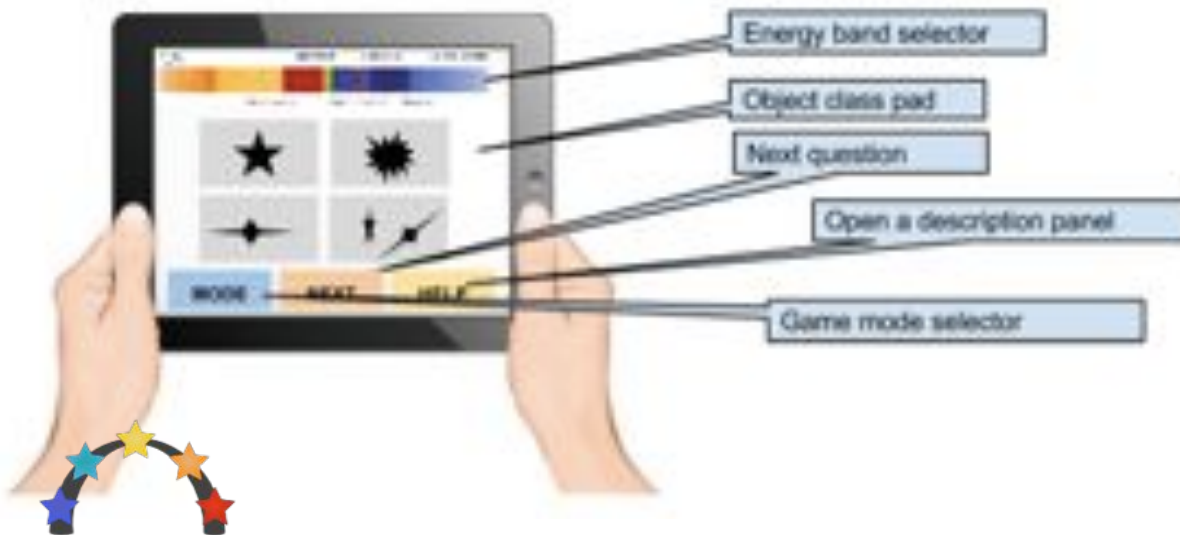


Making the data corpus available through a demo booth

- A wide screen controlled from a mobile device
- The user/player can display objects in various wavelengths, he/she can ask for *extra data*



Extra data



Arches Walker

- The mobile device communicates with the display station with a had hoc Wifi
- The display station hosts a local database with the whole data corpus, it can work without network
- It runs a Java application including the Aladin sky atlas and all viewer (images, html....)
- This application is commanded by Java Servlets
- Work in collaboration with students
- Android development
- Data corpus gathering



Will be delivered as a kit for interested partners





Arches Walker Quiz Help ? Menu

Which class does the displayed instance belong to ?

Galaxy Star Class_2 Class_3 Class_4

Wrong answer!

Characteristic values Need help

Radio IR Visible UV X

Quiz

Arches Walker Quiz Help ? Menu

Learn more Star Next

Sun Proxima Cent. Sirius A

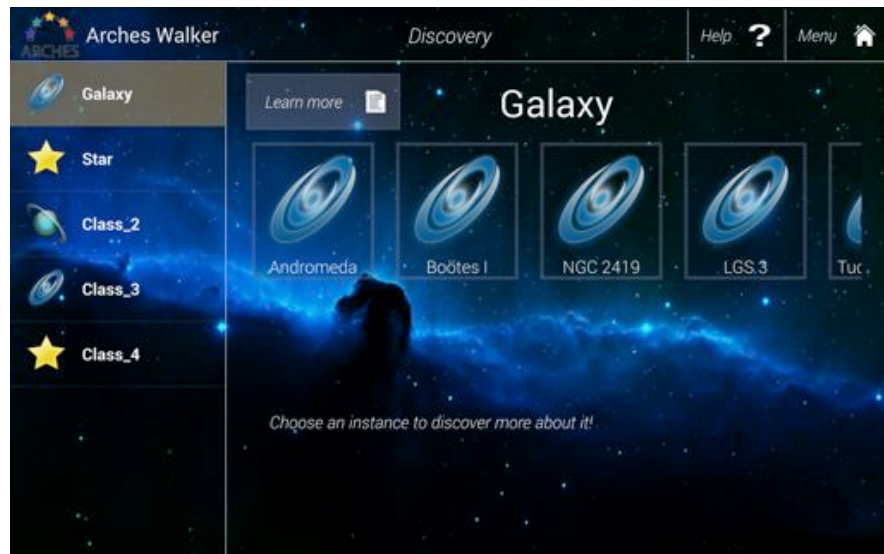
More info about Proxima Cent. Characteristic values Display SED

Touch to move the view

Radio IR Visible UV X

Quiz





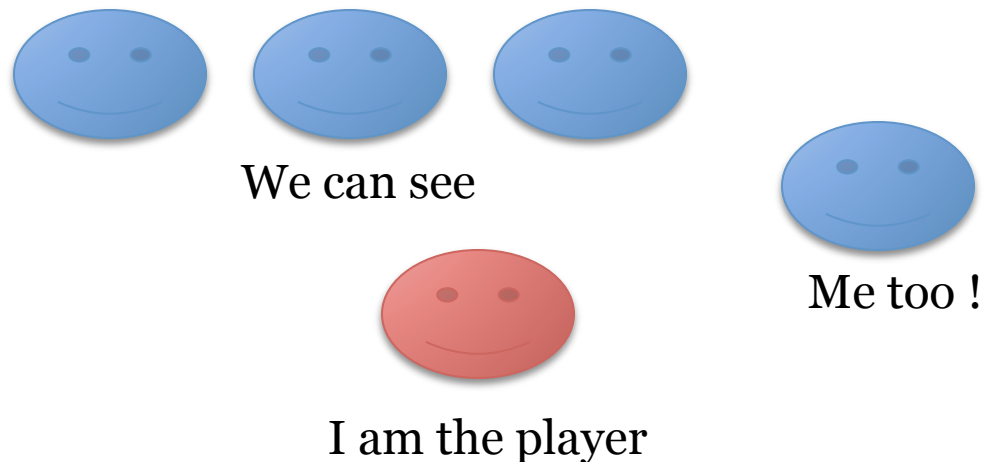
Discovery

Discovery



Remarks

- The same concept can be easily reused for other domains of the astronomy
- A small investment (a desktop + screen and/or projector + an internet tablet)
- Probably more fun than just a touchscreen, larger field of view !!



Questions ?



<http://www.arches-fp7.eu/>



Education R&D around the Oculus Rift

See the presentation done in the frame of the New Technologies session.

Next presentation in Banff !!