

The astronomical services of the CDS at the age of multitouch interfaces and mobility

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Currently, we are witnessing a rapid evolution of new human-machine interfaces based on the widespread use of multitouch screens. This evolution is not just a replacement of the mouse-keyboard couple but requires a recast of the interfaces to take advantage of the new features (example: simultaneous selections in different parts of the screen). “Traditional” operating systems (mostly Windows and Linux) are also moving towards the integration of multitouch. It is possible in Windows7, also in Ubuntu (since release 10.10). The user interfaces of existing applications should be deeply impacted, as it is not just an adaptation of the existing ones: it is a transition from a “selection in menus, click on button, ...” to an intuitive based interaction. In this context the use of the semantics could help to “understand” what the user wants to do and to simplify the interfaces.



Mellinger colored, © Axel Mellinger

We have developed an “Aladin Allsky” lite application for Android, SkySurveys. This application is based on HEALPix and it was a real challenge to provide a tool with good display performances on a basic hardware device compared to a desktop or a laptop. It benefits from OpenGL libraries integration.



Spitzer mission, © JPL/NASA

A multitouch screen and you can use Aladin with your fingers !!!



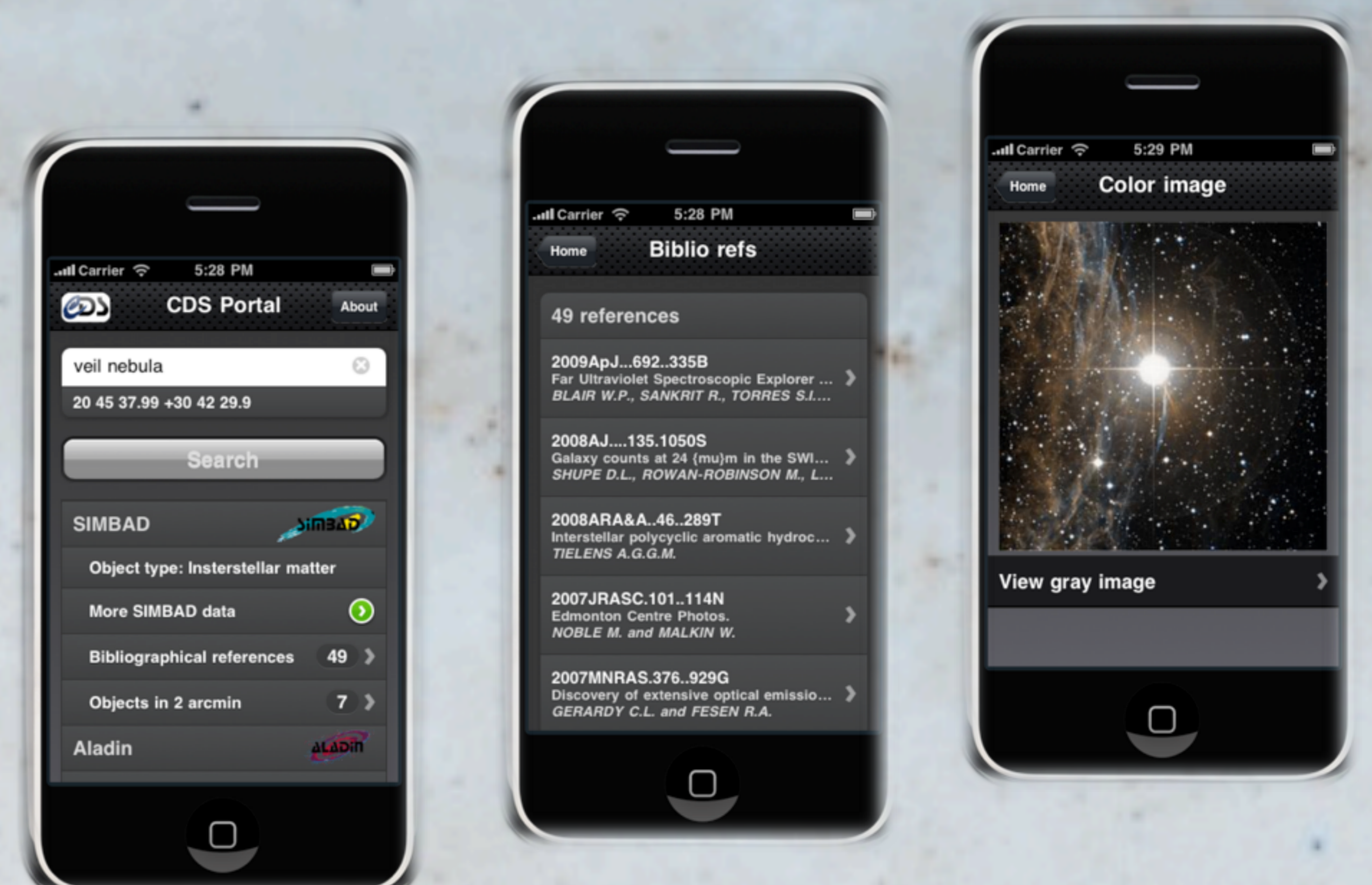
See the full videoclips at <http://cds.u-strasbg.fr/resources/doku.php?id=future>



This work has been shown during the EuroVO-ICE and the IVOA meetings.
Have a look at <http://cds.u-strasbg.fr/resources/doku.php?id=future> for more information
(Internet tablets, technical features, etc.)

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Some views of the CDS Portal on iPod Touch...



We are now focusing the study on the use of HTML5, an emerging technology supported by recent versions of Internet browsers, which can provide rich content. HTML5 has the advantage of allowing developments independent of the mobile platform (“write once, run everywhere”).

We also expect broadening of the user of the services to new audiences and in particular to the educational community through new interface user-friendlier in terms of usability and interaction.