

# // 8b:Vis session

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## **John Alison: Global update on vis**

Already shown in [plenary 6](#)

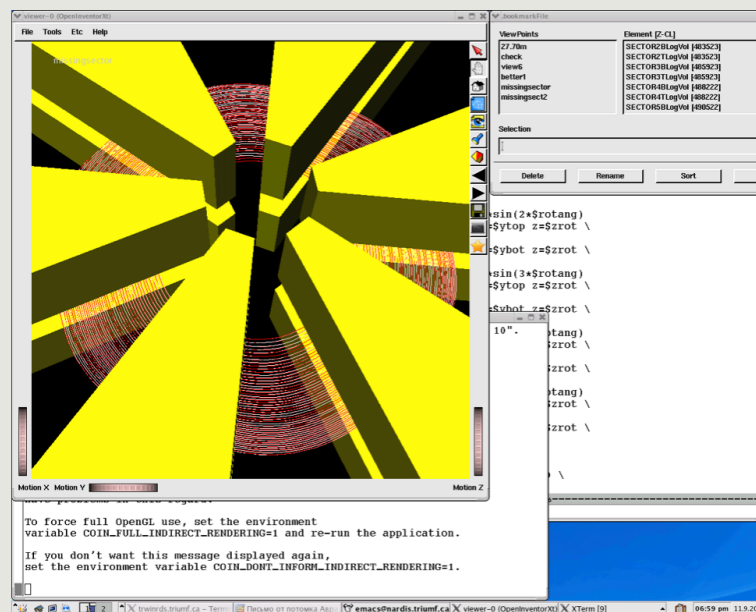
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## Fred Jones: Updates on OpenInventor



### Open Inventor Extended Viewer

- The original Open Inventor viewer (OIX) has been extended (OIXE) with features including element navigation, orientation controls, trajectory following, animations, and saving and restoring viewpoints and camera settings.



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Geant4 2018 Collaboration Meeting Lund 27-31 August



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## **Fred Jones: Updates on OpenInventor**

- New OIQt under development will be similar to OIXE but with minimum dependencies to X librairies
- Some issues are to be fix for CMake configuration
- Issue with Qt5 ?

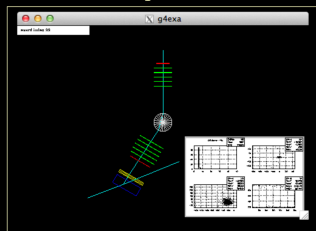
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## Guy Barrand: G4 on Android and iOS

- Already applications ready and available on apple store or google play
  - Issues with data files limitation
  - Issues with vis: Only OpenGL-ES available, but Geant4 is on the top of OpenGL

### First app : g4exa

From the extended/A01 example of 9.3



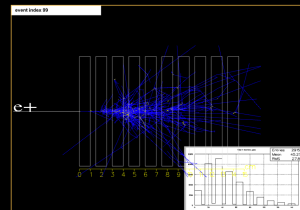
- Rejected by Apple : « we do not want examples/demonstrators, we want apps that **does something** ».
- It exists on GooglePlay.
- Can serve as a template to create your own app !

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### Second app : g4view

- An app presented as a « viewer » for some scientific data (then gdmf files). **Apple had been happy with that.**
- The calorimeter example has clearly a « wow effect ».
- Comparison of what looks like an EM shower versus a proton shows interest. You can show from your pocket, the basement of proton therapy.

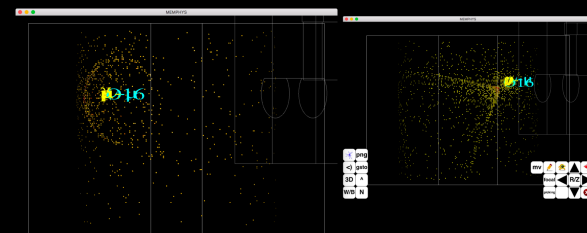


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### Third app : MEMPHYS\_vis

- MEMPHYS : a water Cherenkov neutrino detector simulation revived (long story) in relation to ESSnuSB based... at Lund! (European Spallation Source neutrino Super Beam) (!).



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## **Guy Barrand: G4 on Android and iOS**

- A huge potential for education/outreach. Astronomers are on the store for long now
- Geant4 being portable on iOS and Android, can help to show the way

Discussion :

- Plan to put plots (histograms) in the Qt UI window

Acknowledge Guy's continuing contribution to g4tools

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## **Laurent Garnier: QtDriver status**

- No major developments



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## Other topics :

- The continuing issue with BooleanProcessor and the hope that some work could start soon.
- Thanks to Makoto, RayTracer can now have // world
- During this week, the problem about deprecation of OpenGL by Apple has been raised several times

Apps built using OpenGL and OpenCL **will continue to run in macOS 10.14**, but these legacy technologies are **deprecated in macOS 10.14**. Games and graphics-intensive apps that use OpenGL **should now adopt Metal**.

Usually, apple allow deprecation time is a couple of years before being remove

- How / When migrate from OpenGL to Metal
- Rethinking OpenGL driver ? Using a scene graph as Open Inventor ?

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## **Other drivers**

Thanks to Makoto, RayTracer can now have // world