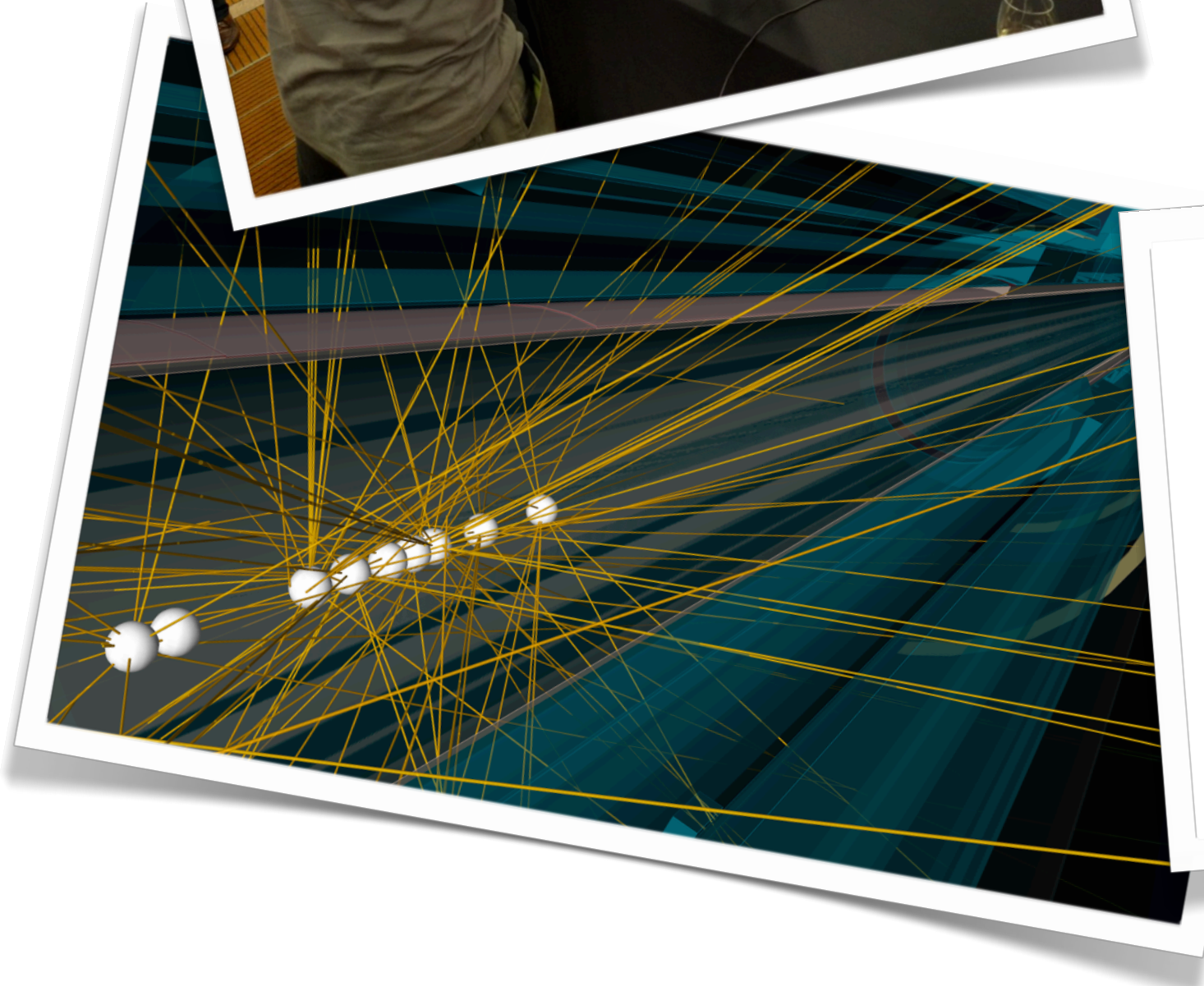
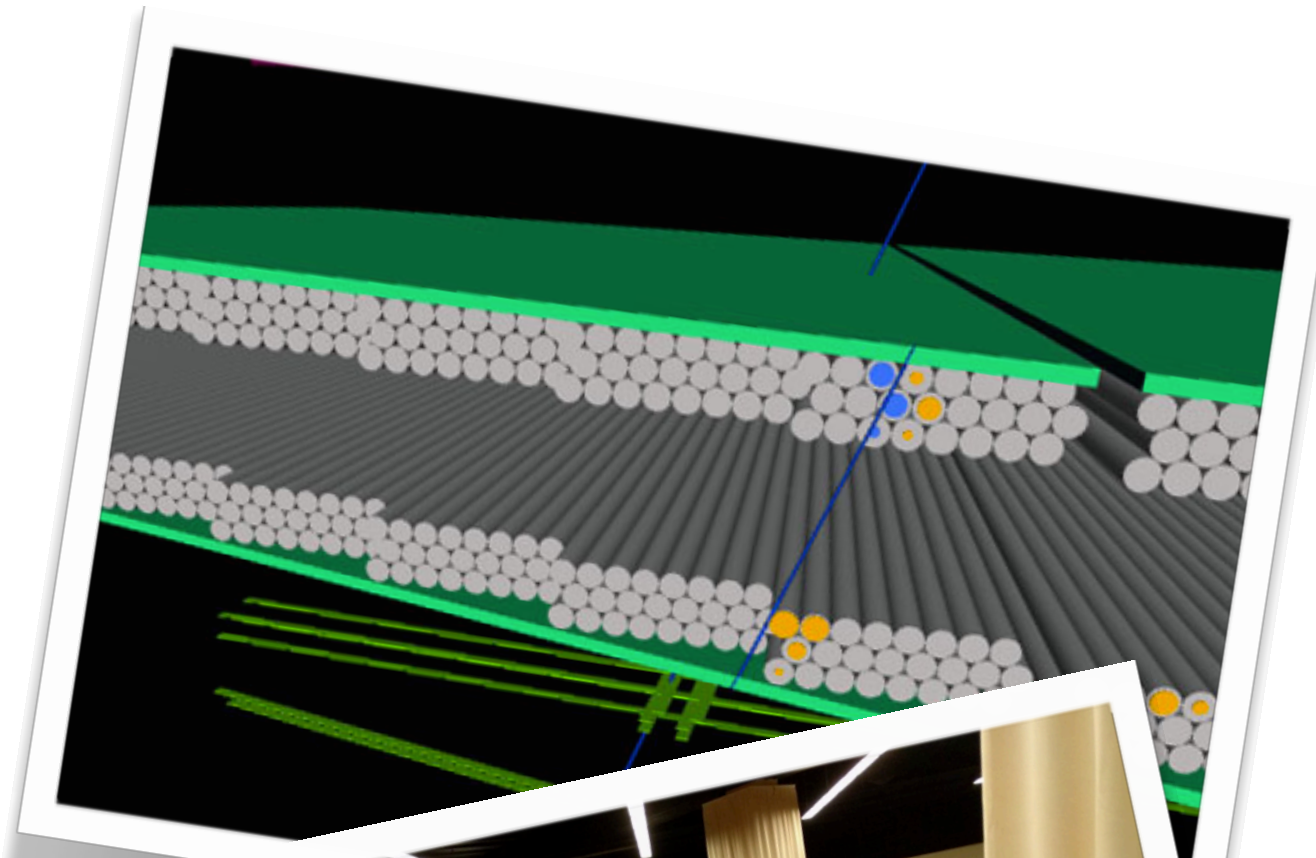


HEP Software Foundation (HSF) Visualization Workshop

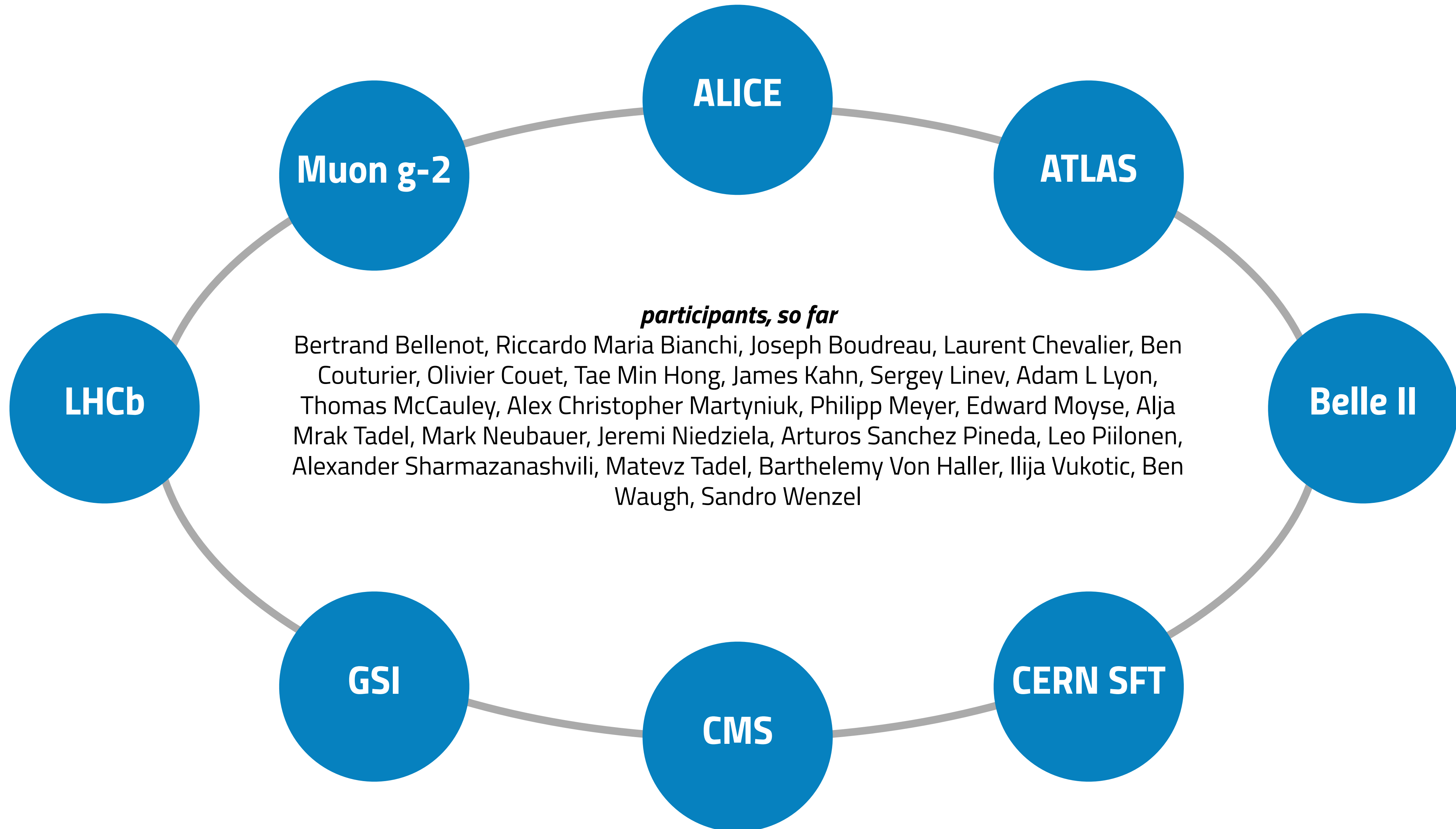


Riccardo Maria BIANCHI
(Pittsburgh)

HSF CWP Visualization Working Group

- Started in October '16
- First meeting at CHEP 2016 (*San Francisco*): <http://cern.ch/go/c9G8>
- It gathers **visualization experts** from **HEP experiments/groups**

HSF Visualization Working Group



HSF CWP Visualization Working Group

- **Scope:**

Visual representation of **event data** overlaid with **detector geometry** for the purpose of HEP research, education and outreach. This representation can be **static** (event displays) or time-dependent (**animations**).

- **Goal:**

Foster **collaboration** among HEP experiments & groups, towards a shared view and the the development of **common software** packages

- Working Group **charge document**: <http://cern.ch/go/HhB9>

- Dedicated **mailing list**: hsf-cwp-visualization@googlegroups.com

Join the discussion!

Visualization Workshop

March 28-30, at CERN and on Vidyo

Agenda: <https://indico.cern.ch/event/617054/>

We choose to have **3 afternoons** (to let our US colleagues connect)

Visualization Workshop

MOTIVATIONS:

- Many of our software tools are **quite old** (but some groups started exploring modern technologies already)
- **Fragmented development**, with many similar tools in different experiments: *hard to find manpower to maintain them*
- **Flat budgets** for Computing&Software in the next years:
 - *funding agencies prefer to support activities useful to more than one experiment/group*
 - *it's now **harder to ask for funds** for specific in-house tools*
- Many tools are **developed in-house**:
 - ***hard to maintain,***
 - *we don't take advantage of the work done in **other communities,***
 - *we do not take advantage of industry standards and **community-driven open source tools***

Visualization Workshop

GOALS:

- Look at what is available “**outside**”
- **Modernize** our software tools
- Define **common packages**
- Fostering **collaborative development**

Visualization Workshop

- **1st day: THE CURRENT HEP LANDSCAPE AND INDUSTRY TRENDS**
 - **Industry trends**, thanks to our invited speakers:
 - Peter Messmer (**NVIDIA**) - *Rendering, VR*
 - Sean Harmer, Mike Krus, Kevin Ottens (**KDAB**) - *Qt3D, C++ 3D graphics*
 - Jesus Fernandez (**Qt Company**) - *QtWebGL, QtCanvas3D, web-based 3D graphics*
 - The status of our **HEP tools**, talks from the experiments/groups
- **2nd day: FOSTERING COLLABORATION**
 - *can we build a shared consensus and a common view within the HEP Visualization community?*
 - *What visualization tools we want for HEP in the future?*
 - *How can we develop them in a shared and collaborative way?*
- **3rd day: WRITING SESSION**
 - focused on planning the writing of the CWP Visualization chapter and start writing

A second meeting soon

- Some more people wanted to present their work and ideas at this workshop
- Also, some more people from industry wanted to share their vision with us
- but, unfortunately, **they could not make it this week**
- I propose to have **another one-day meeting** in the next few weeks, to let interested people to present their tools and ideas
- More news via e-mail in the next days