PBR-ready glTF in instant3Dhub / instantUV

Max Limper

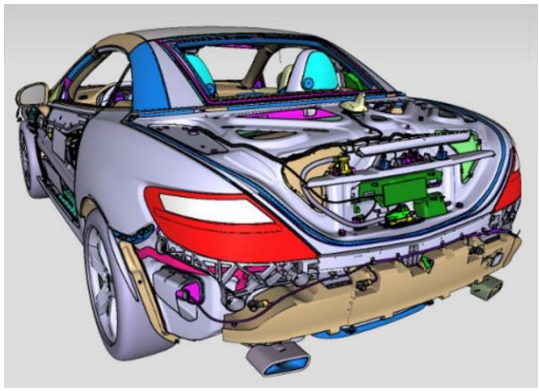
Fraunhofer IGD / TU Darmstadt

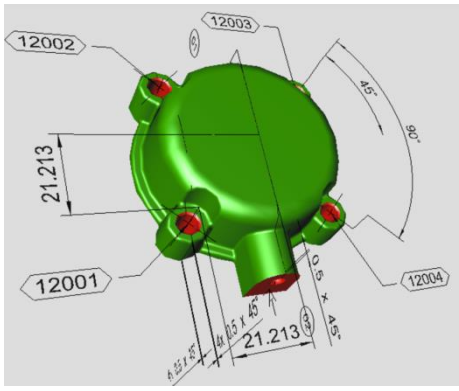
Fraunhofer IGD

Motivation:
PBR in instant3Dhub / instantUV *

- **Distributed** Visualization (VaaS) Software Suite
  - Various **client hardware** configurations (Desktop, Mobile)
  - Various **client software** configurations (JS/Web, C++, Java)
  - Different **GPU / shading languages**

*Additional Information:
Instant3dhub.com / instantuv.org





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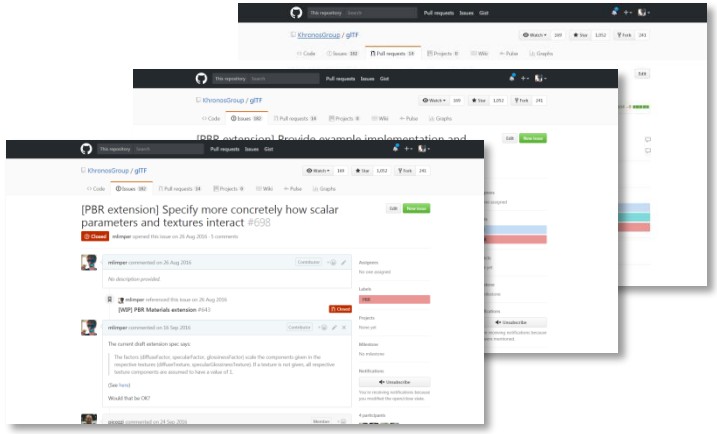
Proposal 06/2016
FRAUNHOFER_materials_pbr

- Tremendous feedback - huge momentum!

- We were, a bit, happily overwhelmed…
  - limited capacities for moving forward so quickly
  - as always, the devil‘s in the details …



Some Questions & TODOs

public reference implementation?

normal maps?

one or two parameters sets?

displacement maps?

bump maps?

where to put env. maps?

which approximations?

occlusion maps?

why are we doing this?

texture factors?

gamma / sRGB?

Some Questions & TODOs

public reference implementation?

one or two param

w

which approxim

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nt maps?

mp maps?

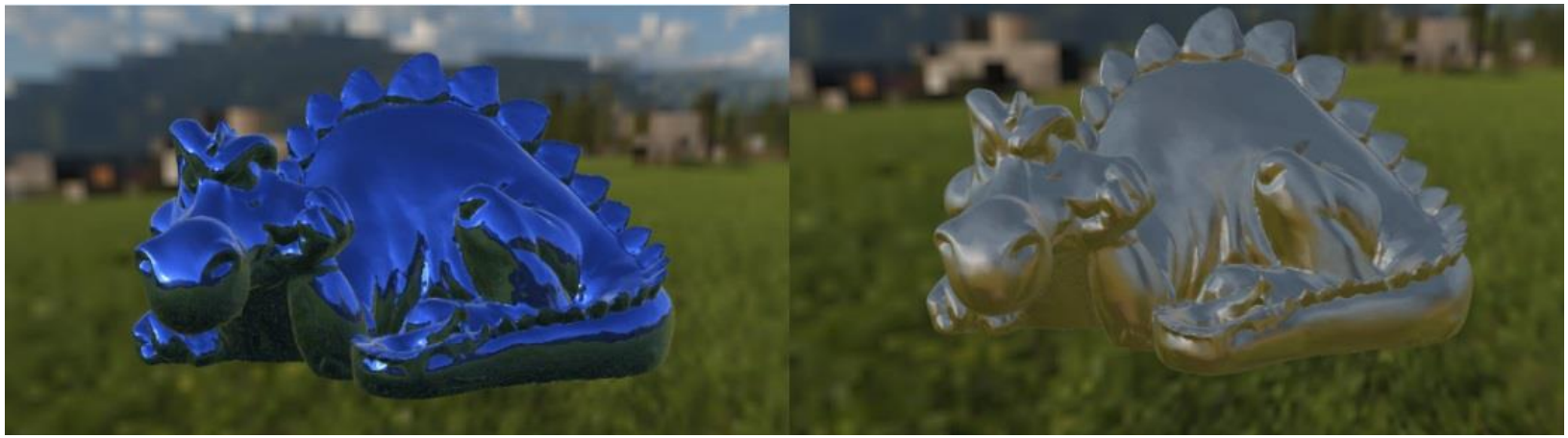
ion maps?

gamma / sRGB?

We can work it out together
Thanks to a great glTF community!

- Special thanks to the heavily involved:
  - Patrick Cozzi (AGI, University of Pennsylvania)
  - Saurabh Bhatia (Microsoft)
  - Gary Hsu (Microsoft)
  - Mohamad Moneimne (University of Pennsylvania)
  - Eric Haines (Autodesk)
  - Cedric Pinson (Sketchfab)
  - Jeff from Marmoset
  - Ed Mackey (AGI)
  - Alexey Knyazev
  - Marco Hutter

Demo Time!



Thanks for your attention!