MITK Diffusion: Adapting a MITK based application to topic focused medical research

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A very brief description of our research

- Diffusion restricted by anatomy
- This restricted diffusion can be measured using dMRI
A very brief description of our research – Page 2/50
Why do we want our own application?

• Own scientific topic which other researchers in our group do not work with
• Close cooperation with medical researchers in our field, provide access to our research
• Provide not only the results of our experiments, but also the methods to others world-wide
What do we want?

• A software that we can use to test new code/algorithms
  • Versatile and powerful
  • Easy to use
• A software that medical researchers can use without any coding experience
  • The tools needed for their work
  • Not cluttered by a lot of tools not needed for their work
  • Different Easy to use
What do we have?

• The DiffusionImaging module(s)
• The diffusionimaging plugin
• The MITK Workbench
Great let’s use the workbench and just switch on everything we need!

Too confusing
Why create a new app?

• Not possible to do everything we need within the workbench
• Own branding – useful for focusing on the community
• There is no need to synchronize everything with the workbench
What to change, how to change it?

• Iterations, Iterations, Iterations
• Several concepts where tried and changed
What to change, how to change it?

• Using only perspectives, user can not manipulate views
What to change, how to change it?
The current perspective concept
Unify input concept
What to change, how to change it?

- Own name/icon/Installer name
- More focus on the welcome screen
What to change, how to change it?

- Own name/icon/Installer name
- More focus on the welcome screen
- Specific workflows allow for tailored descriptions
What to reuse/keep?

- Many of the views of MITK workbench
- A lot of the framework logos, etc.
  - There is a limited amount of work we can use for this
Other challenges

- Testing
- Tied to MITK release cycle
Where do we offer it?

• Flyers at conferences, perform in challenges
• Available via mitk.org
• Available via nitrc
Who is we anyway?
Any questions?

Thank you for your attention!