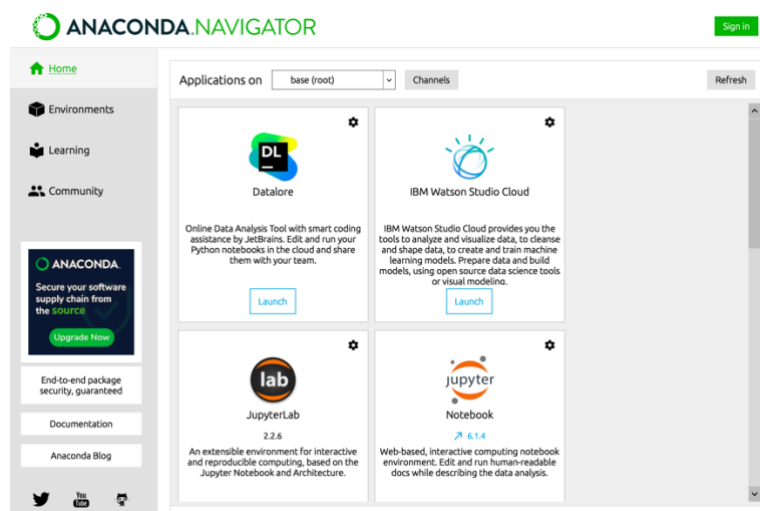


Self-assessment exercises:

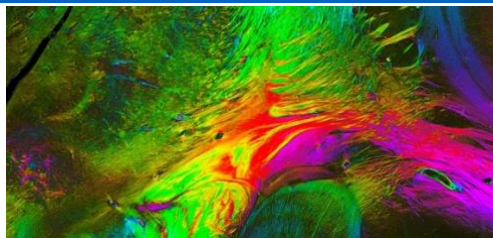
Imaging in Medicine

Prof. Dr. Markus Axer

- 1) Download and install the anaconda framework (<https://www.anaconda.com>) and make familiar with the JUPYTER Notebook, a web-based interactive computing notebook environment.



- 2) Download the following color image: https://www.fz-juelich.de/SharedDocs/Bilder/INM/INM-1/DE/Faserbahnarchitektur/Hippocampus.png?__blob=poster.



- 3) Load and plot the image using Python via the JUPYTER Notebook.
- 4) What are the characteristics of the image (e.g., pixel size, resolution, color model)?
- 5) Split the three color channels and plot each color channel as an individual image.
- 6) Generate a gray scale image from the color channels according to $Y=1/3(R+G+B)$.