Colour blindness

Colour blindness, the inability to perceive certain colours, affects an important part of the human population. Visual accessibility has often been disregarded in Academia (more here).

We want to make the content of ProgPal 2021 as much accessible as possible, that is why we ask all presenters to make their talks and posters colour-blindness accessible.
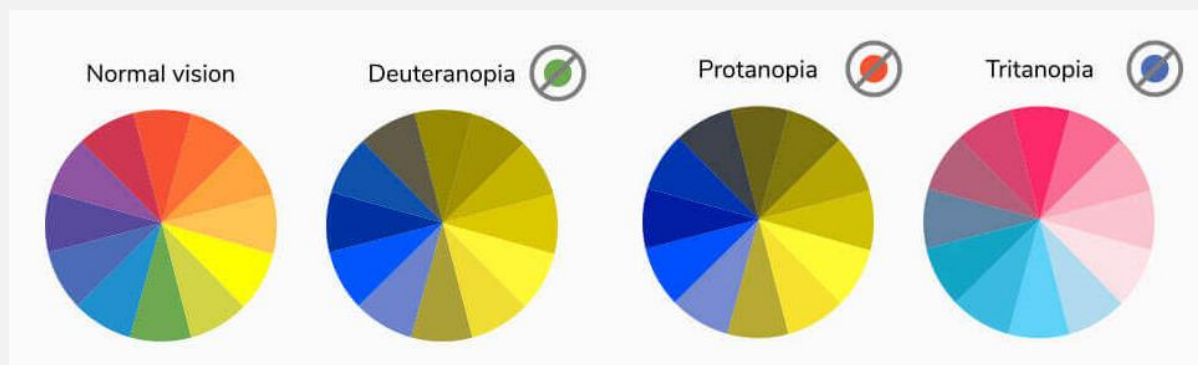

Different types of colour-blindness. Image source here.

Making your presentations visually accessible

Here you can find our university's guidelines concerning making visual content visually accessible. Our recommendations are as follows:

- Use a **colour-blindness-friendly colour palette**. As a general rule, avoid red/green, blue/purple and light green/yellow combinations. You can find more info and accessible palettes here. If you are making figures in R, the viridis package has a good selection.
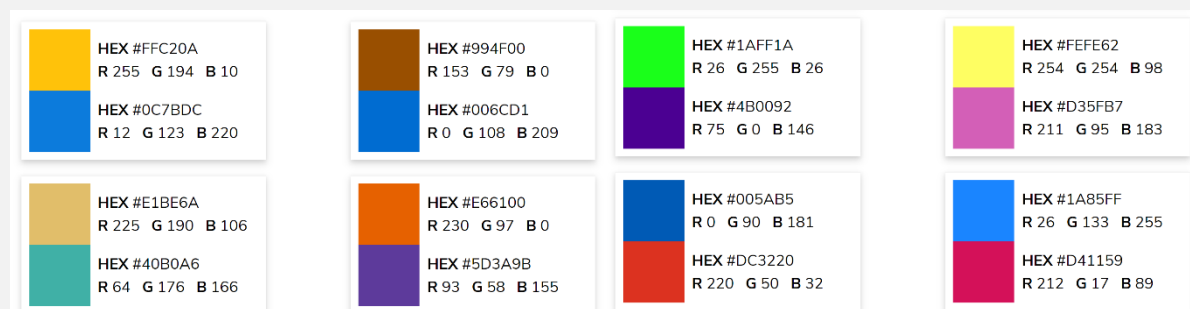
Examples of colour-blind approved colour combinations. Image source here.

- Aim for a **high contrast ratio** (more info [here](#)). Generally, dark-coloured fonts on a light-coloured background (avoid pure white) are considered easier to read
- Use both a combination of different **colours and shapes** in your figures
- Keep backgrounds as simple as possible

How to check if your poster/talk is colour-accessible?

If you are using the **Adobe Illustrator** software, you can simulate colour-blindness while designing by going to **View > Proof Setup > Color Blindness**. More info [here](#).

We are not aware of a similar feature in Inkscape, PowerPoint or Google Slides. In all other cases, you can check if your poster/video talk is colour-accessible in the following ways.

- Screenshot your slides and drag-and-drop them into **Coblis website** that allows you to see your .jpg screenshots/images with filters that simulate colour-blindness
- Download the **Color Oracle software** (Windows, Mac, Linux) or the **Sim Daltonism software** (Mac) that lets you preview your screen with colour-blindness simulating filters

In all cases, and for each of the colour filters available, check if your talk presentation or poster is still readable. Make changes when necessary, so that everyone can understand your research!

Filters that help colour-blind people distinguish colours better

On your computer display, you can add filters that help with better distinguishing colours.

On Windows 10

1. Go to Start > Settings
2. Search **Colour filters**
3. Toggle on **Turn on colour filters**
4. **Try out all colour filters** available

On MacOS

1. Go to the Apple menu > System Preferences
2. Click Accessibility > Display and click to **Colour Filters**
3. Click **Enable Colour Filters**
4. **Try out all colour filters** available

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