Lecture 26

Flux integrals

Reminders

2. Midterm 11/10/2022: 5:30-7:30
Focus on 15-25 Psets. So, today's lecture is the last topic. So, CURVES, SURFACES, Line and surface INTEGRALS, Linear and Quadratic APPROXIMATION, GREEN and FTOLI are the main topics.

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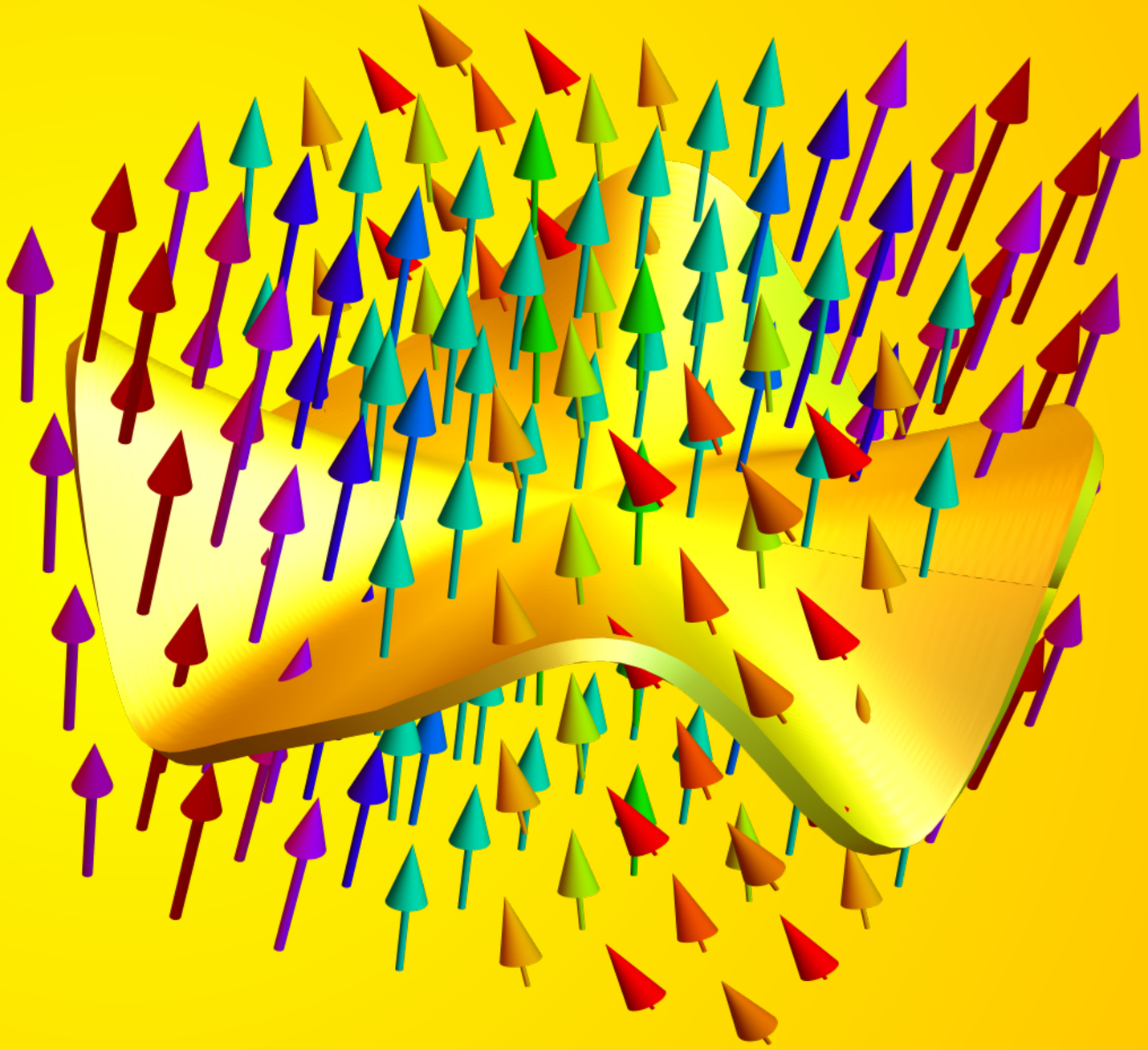
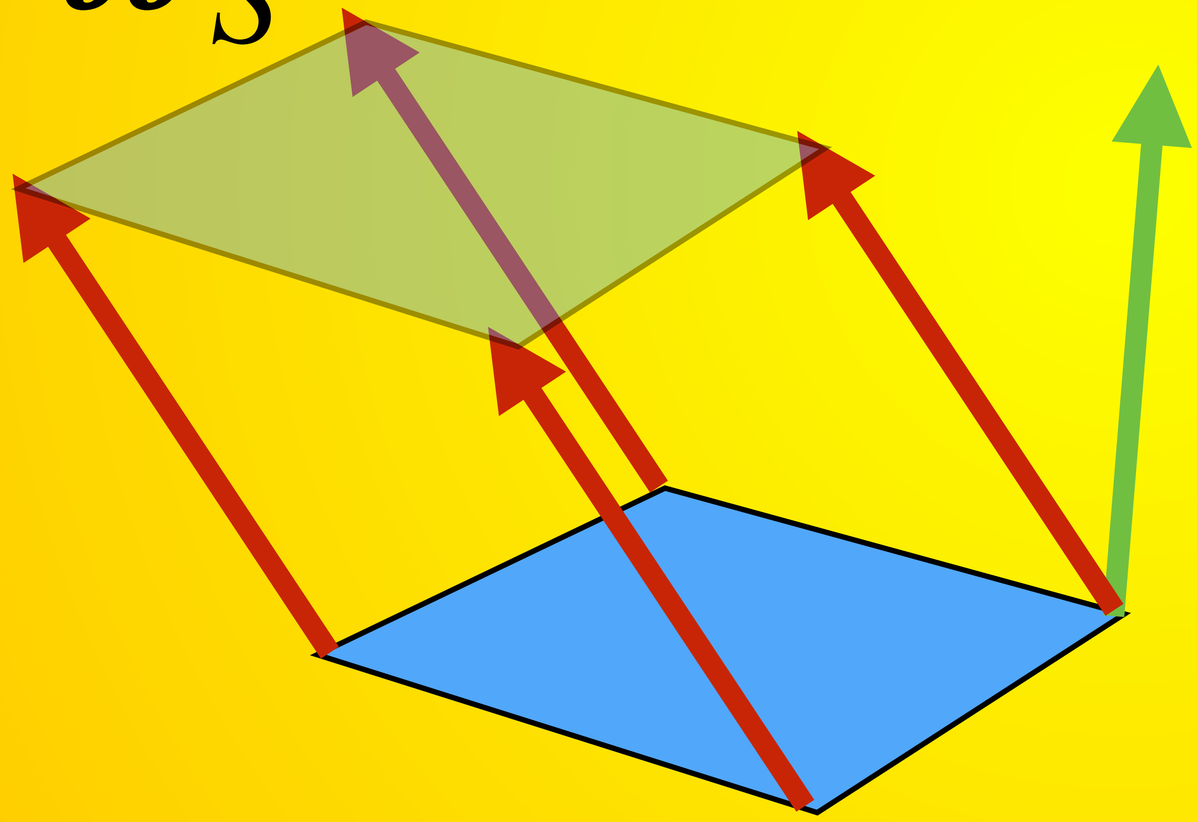
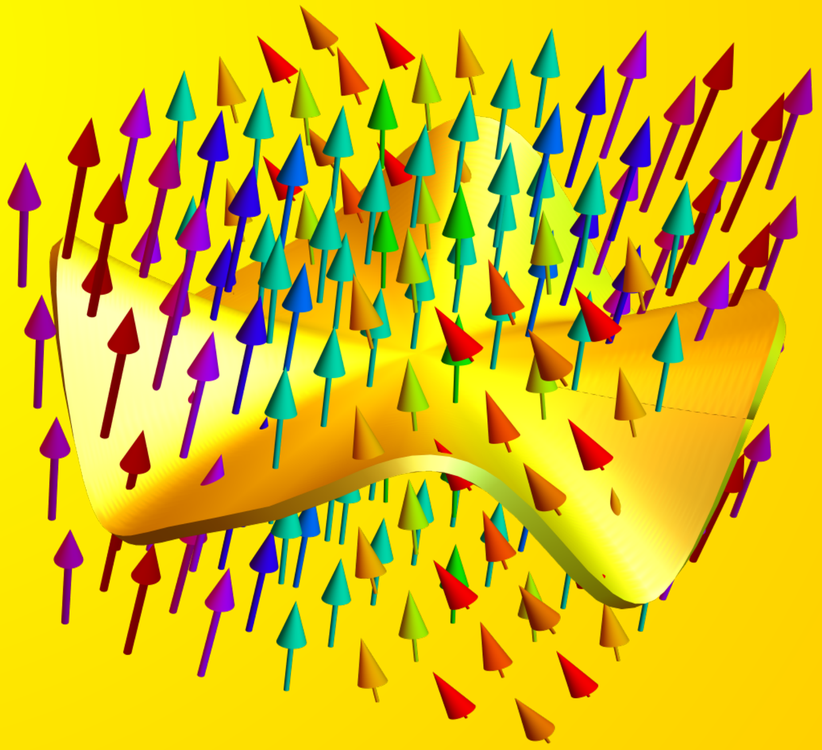
The flux

$$\iint_S \overrightarrow{F} \cdot \overrightarrow{dS}$$



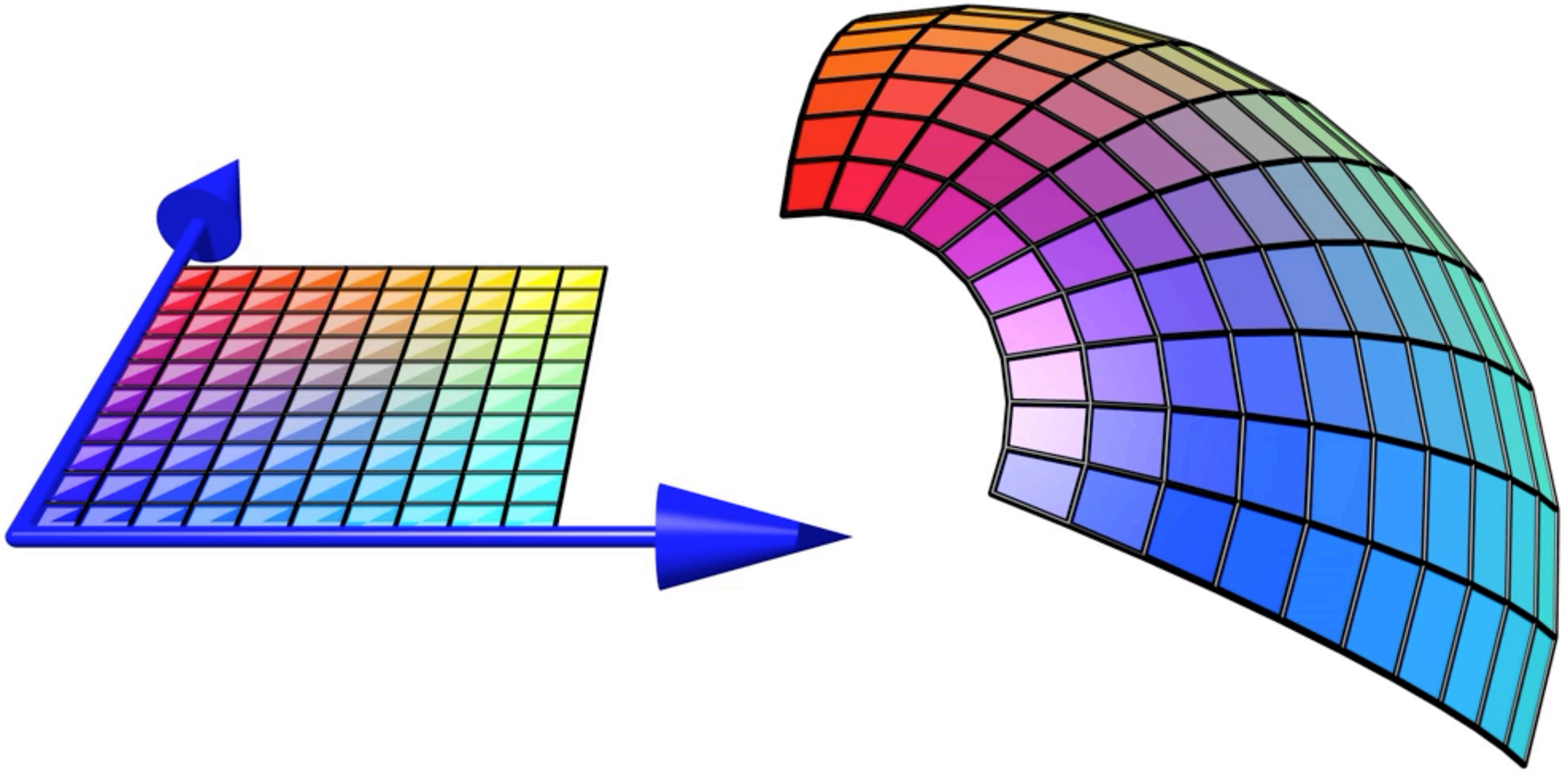
$$\iint_S \vec{F}(\vec{r}(u,v)) \cdot \vec{r}_u \times \vec{r}_v \, du dv$$





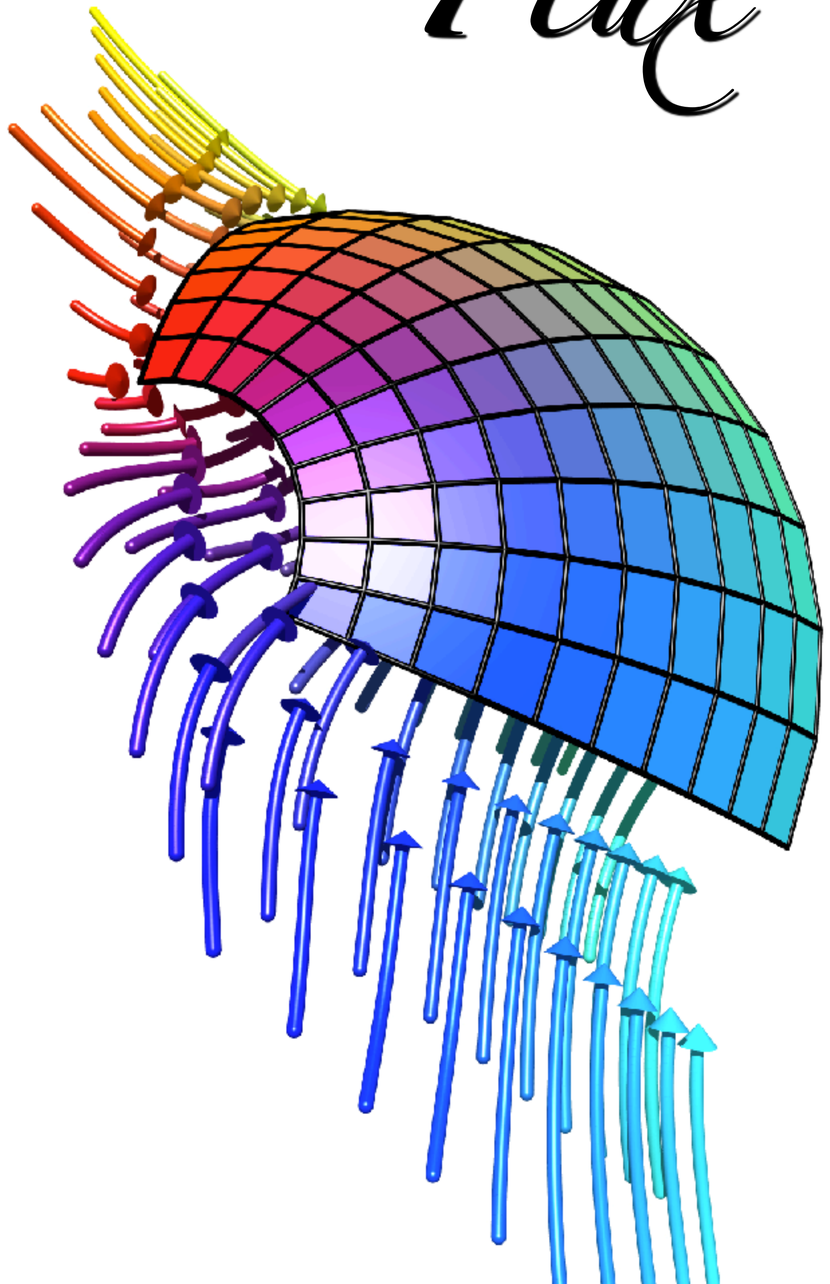
Some old animations

Parametrization



2000

Flux



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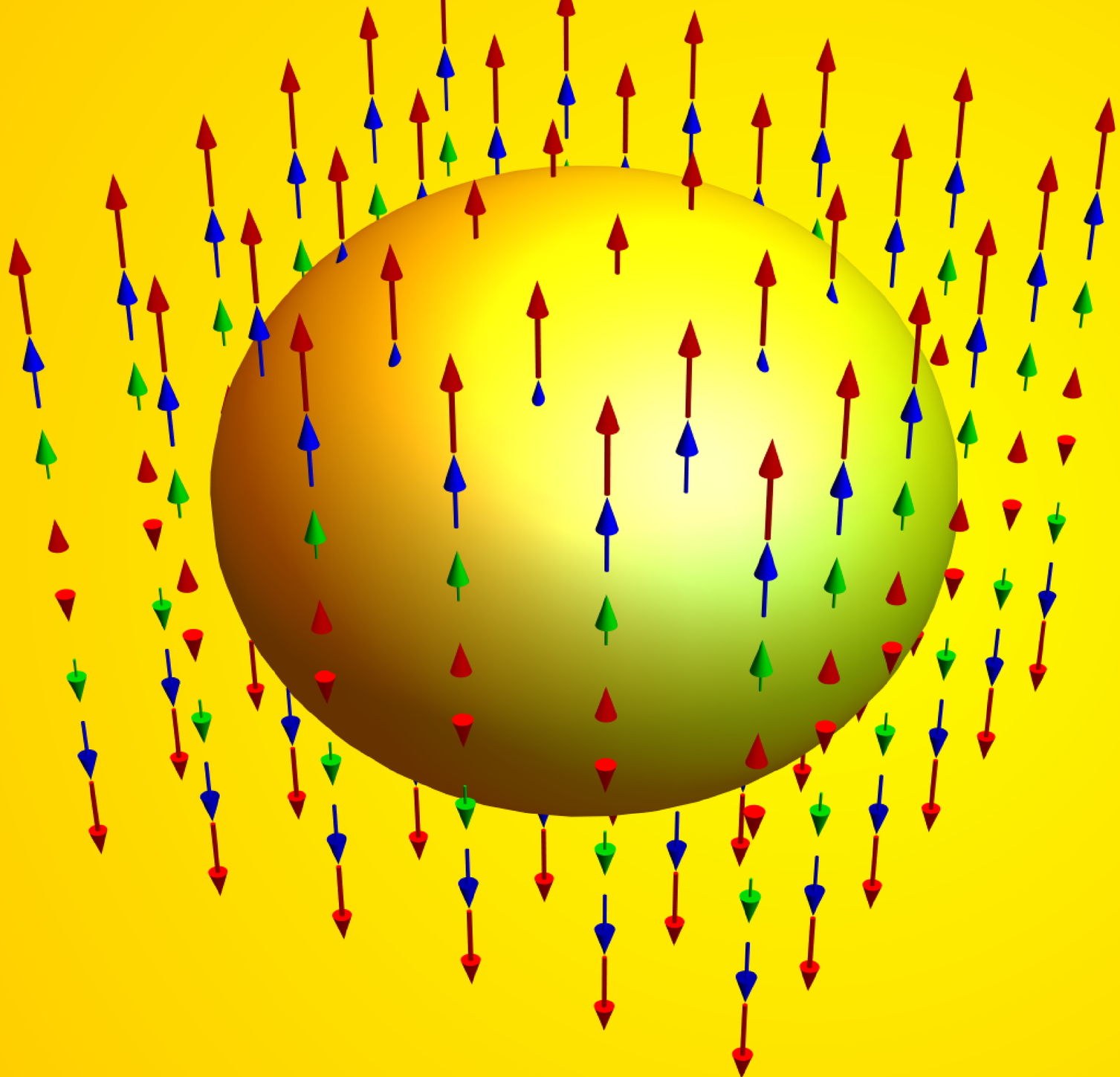
A problem



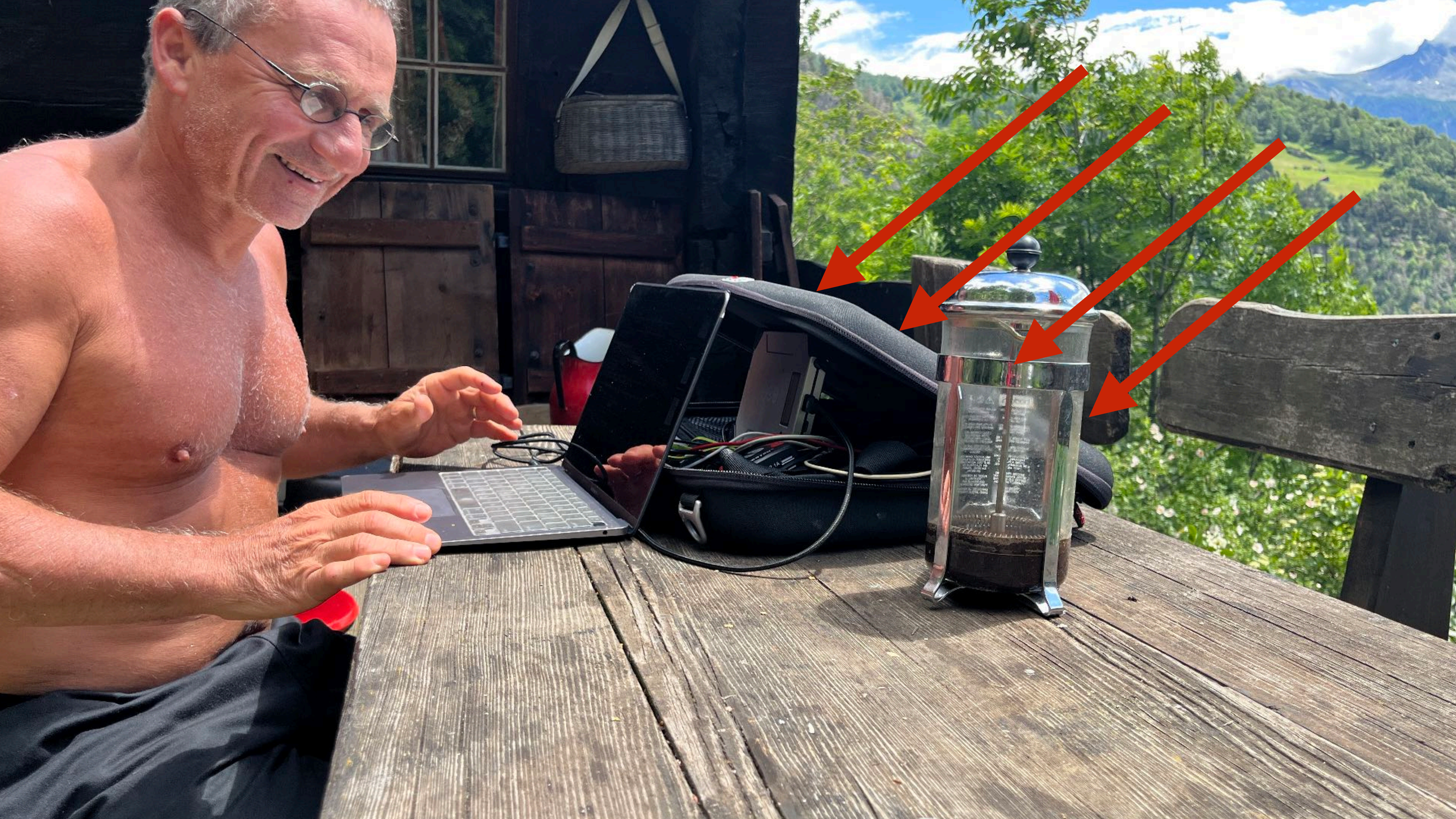
Flux positive
or negative
or zero?

Applications

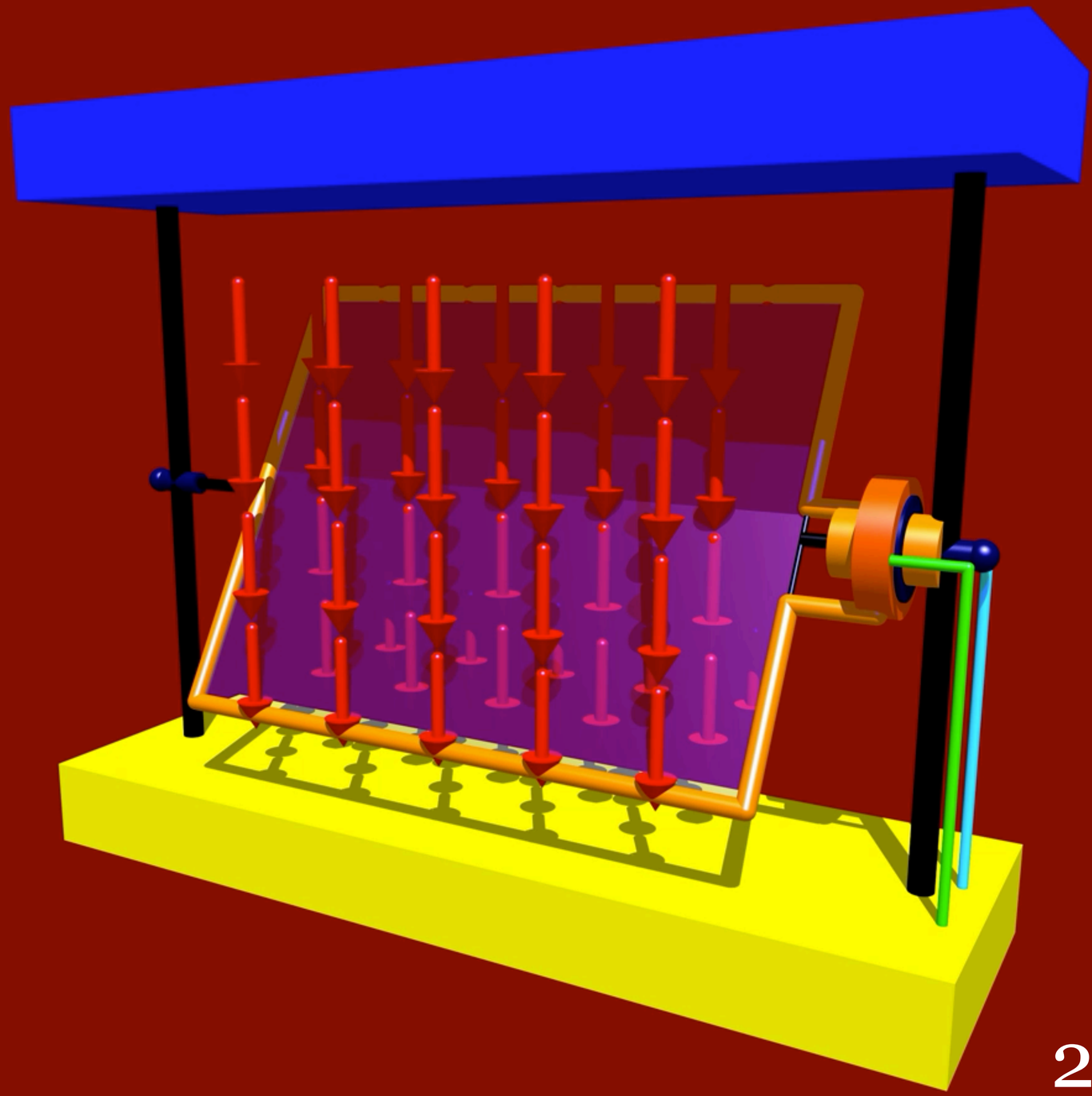
NEVER GIVE UP

NEVER STOP TRYING TO EXCEED YOUR LIMITS. WE NEED THE ENTERTAINMENT.


MARSPRO
GOAL ZERO
GOAL ZERO




Salmenfee



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THE END