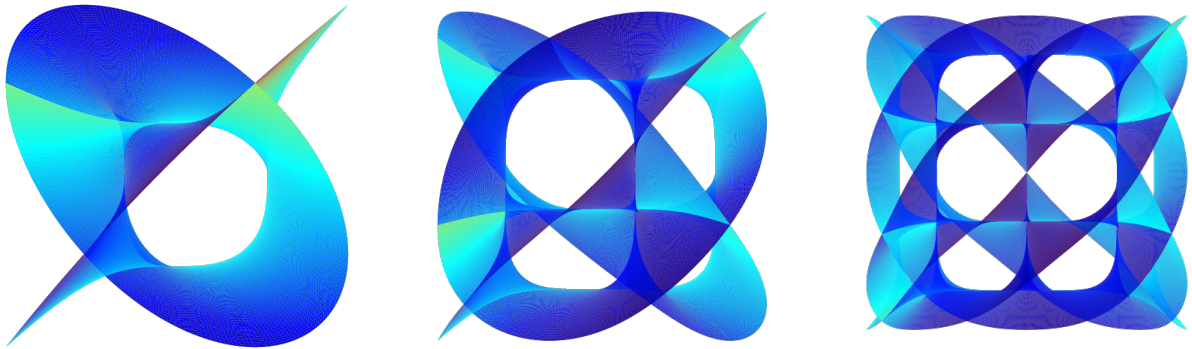


CaleTZ

A Typst package for visualizing Calabi-Yau manifolds using CeTZ 3D drawing primitives.

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CaleTZ is a Typst package for visualizing **Calabi-Yau manifolds** using **CeTZ** 3D drawing primitives. It generates colorful, smooth 3D surfaces with adjustable parameters, making it easy to explore complex geometries directly in Typst.



Installation

Using just

First, install just if you don't have it yet:

```
cargo install just
```

Then, install the CaleTZ package:

```
git clone https://github.com/rice8y/caletz.git
cd caletz
just install
```

This installs the package locally to Typst's package directory.

Using typkg

First, install typkg if you don't have it yet:

```
cargo install --git https://github.com/rice8y/typkg.git
```

Then, install the CaleTZ package:

```
typkg install https://github.com/rice8y/caletz.git
```

This will also install the package locally for Typst usage.

Usage Example

```
#import "@local/caletz:0.2.0": calabi-yau

#set page(width: auto, height: auto, margin: 1cm)
#calabi-yau(
  power: 3,
  angle: 0.4,
  subdivisions: 20
)
```

Parameters

- `power`: Degree of the manifold (e.g., 3). Must be a positive integer.
- `angle`: Adjusts the combination of z-coordinates; smaller values flatten the surface.
- `subdivisions`: Controls mesh density; higher values give smoother surfaces.
- `colormap`: Optional, default "jet". Can be "viridis", "plasma", "cool", or "hot".
- `scale-factor`: Optional, default 3.0. Scales the entire mesh.
- `rotation`: Optional, default (30deg, 45deg, 0deg). Rotates the 3D view.

For best results, use a high `subdivisions` value, but note it increases computation.

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