

User Manual 3.3 Elliptic cone

De Wiki

Aller à : [navigation](#), [rechercher](#)

[User Manual 3.3 Elliptic cone](#)

Sommaire

- [1 Definition](#)
- [2 Implementation](#)
- [3 Instantiation](#)
- [4 Usage](#)

Definition

The elliptic cones are defined in a 3D space by their origin (apex), their local frame, their height and the two angles defining the elliptic basis :



Implementation

The EllipticCone object in the SIRIUS library implements the [Cone Interface](#). Please refer to the [Javadoc](#) for a complete list of public methods.

Instantiation

The object is built from three vectors (Vector3D) and three doubles :

```
Vector3D originCone = new Vector3D(1.0, 1.0, 1.0);
Vector3D direction = new Vector3D(2.0, 0.0, 0.0);
Vector3D inputUvector = new Vector3D(1.0, 1.0, 0.0);
double angleU = FastMath.PI / 4.0;
double angleV = FastMath.PI / 8.0;
double height = 5.0;
EllipticCone cone = new EllipticCone(originCone, direction, inputUvector,
angleU, angleV, height);
```

The local frame is built such as :

- W is the direction vector once normalized
- U is orthogonal to W and its direction is defined by the 'input U vector'
- V completes the frame

Usage

Please refer to the [MAT_GEO_Home#HInteractions Interactions with other geometrical objects section] for methods inherited from the Shape interface.

Menu de navigation

Outils personnels

- [13.59.73.248](#)
- [Discussion avec cette adresse IP](#)
- [Créer un compte](#)
- [Se connecter](#)

Espaces de noms

- [Page](#)
- [Discussion](#)

Variantes

Affichages

- [Lire](#)
- [Voir le texte source](#)
- [Historique](#)
- [Exporter en PDF](#)

Plus

Rechercher

PATRIUS

- [Welcome](#)

Evolutions

- [Main differences between V4.15 and V4.14](#)
- [Main differences between V4.14 and V4.13](#)
- [Main differences between V4.13 and V4.12](#)
- [Main differences between V4.12 and V4.11](#)

- [Main differences between V4.11 and V4.10](#)
- [Main differences between V4.10 and V4.9](#)
- [Main differences between V4.9 and V4.8](#)
- [Main differences between V4.8 and V4.7](#)
- [Main differences between V4.7 and V4.6.1](#)
- [Main differences between V4.6.1 and V4.5.1](#)
- [Main differences between V4.5.1 and V4.4](#)
- [Main differences between V4.4 and V4.3](#)
- [Main differences between V4.3 and V4.2](#)
- [Main differences between V4.2 and V4.1.1](#)
- [Main differences between V4.1.1 and V4.1](#)
- [Main differences between V4.1 and V4.0](#)
- [Main differences between V4.0 and V3.4.1](#)

User Manual

- [User Manual 4.15](#)
- [User Manual 4.14](#)
- [User Manual 4.13](#)
- [User Manual 4.12](#)
- [User Manual 4.11](#)
- [User Manual 4.10](#)
- [User Manual 4.9](#)
- [User Manual 4.8](#)
- [User Manual 4.7](#)
- [User Manual 4.6.1](#)
- [User Manual 4.5.1](#)
- [User Manual 4.4](#)
- [User Manual 4.3](#)
- [User Manual 4.2](#)
- [User Manual 4.1](#)
- [User Manual 4.0](#)
- [User Manual 3.4.1](#)
- [User Manual 3.3](#)

Tutorials

- [Tutorials 4.15](#)
- [Tutorials 4.14](#)
- [Tutorials 4.13.5](#)
- [Tutorials 4.12.1](#)
- [Tutorials 4.8.1](#)
- [Tutorials 4.5.1](#)
- [Tutorials 4.4](#)
- [Tutorials 4.1](#)
- [Tutorials 4.0](#)

Links

- [CNES freeware server](#)

Navigation

- [Accueil](#)
- [Modifications récentes](#)
- [Page au hasard](#)
- [Aide](#)

Outils

- [Pages liées](#)
- [Suivi des pages liées](#)
- [Pages spéciales](#)
- [Adresse de cette version](#)
- [Information sur la page](#)
- [Citer cette page](#)

- Dernière modification de cette page le 4 avril 2018 à 14:16.

- [Politique de confidentialité](#)
- [À propos de Wiki](#)
- [Avertissements](#)

- 