

Accepted Manuscript

New methods for the geometrical analysis of tubular organs

Florent Grélard, Fabien Baldacci, Anne Vialard,
Jean-Philippe Domenger

PII: S1361-8415(17)30122-6
DOI: [10.1016/j.media.2017.07.008](https://doi.org/10.1016/j.media.2017.07.008)
Reference: MEDIMA 1284



To appear in: *Medical Image Analysis*

Received date: 20 December 2016
Revised date: 8 June 2017
Accepted date: 27 July 2017

Please cite this article as: Florent Grélard, Fabien Baldacci, Anne Vialard, Jean-Philippe Domenger, New methods for the geometrical analysis of tubular organs, *Medical Image Analysis* (2017), doi: [10.1016/j.media.2017.07.008](https://doi.org/10.1016/j.media.2017.07.008)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Highlights

- A new orthogonal plane estimator for tubular organs is proposed.
- It can be used directly on the 3D segmented organ.
- Orthogonal planes allow us to refine existing skeletons by pruning and recentering.
- We also use orthogonal planes to compute our own curve-skeleton.
- The proposed methods are robust to noise, irregularities, and handle bifurcations.

Download English Version:

<https://daneshyari.com/en/article/4953341>

Download Persian Version:

<https://daneshyari.com/article/4953341>

[Daneshyari.com](https://daneshyari.com)