

# VOXEL

## H2020-FETOPEN-2014-2015-RIA

Volumetric X-rays at Extremely Low dose

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**INDUSTRIALES**  
ETSII | UPM



## **I. VOXEL project**

- **Motivation and objectives**

## **II. VOXEL project: structuring the project**

- **Consortium**
- **Writing the proposal to the appropriate call**
- **If not SUCCESS then GO TO II**

## **III. VOXEL project: rewards**

- **Job stability (kind of)**
- **Creation or enhancement of research groups/facilities**
- **Ground for excellent collaborations**



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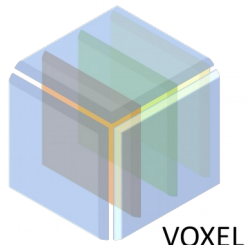


# VOXEL

## Motivation & objectives



- I. Computerized tomography has revolutionized modern medicine**
- II. It also has industrial applications (void, cracks and defect detection, tolerancing analysis ...)**
- III. VOXEL is a disruptive approach to tomography**
  - Adapt Lippman's *integral photography* to X-rays
  - It has the potential to reduce the dose of ionizing radiation
  - It has the potential to reach state-of-the-art resolution for X-ray optics





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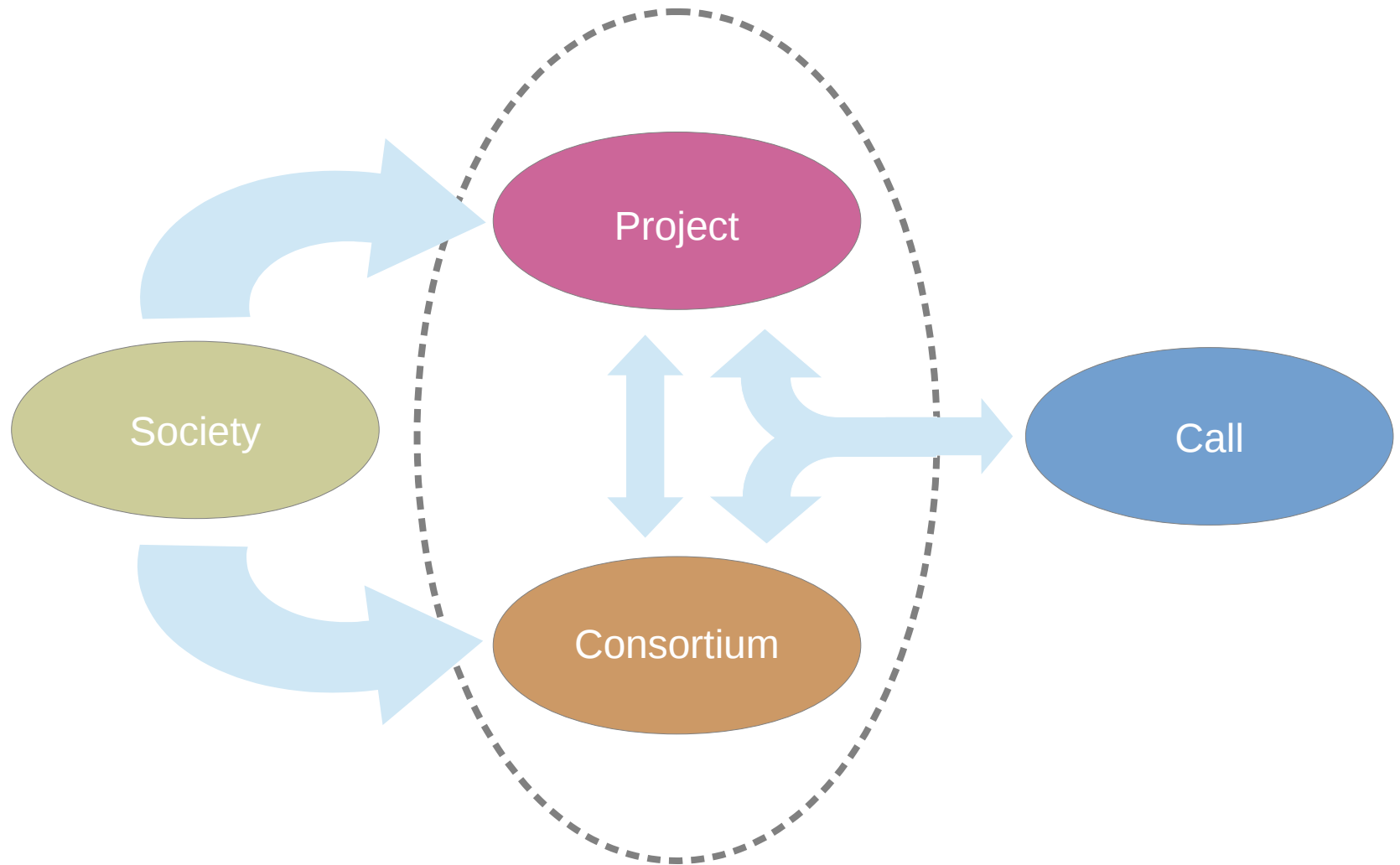
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# Structuring the project





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## **I. Multidisciplinary**

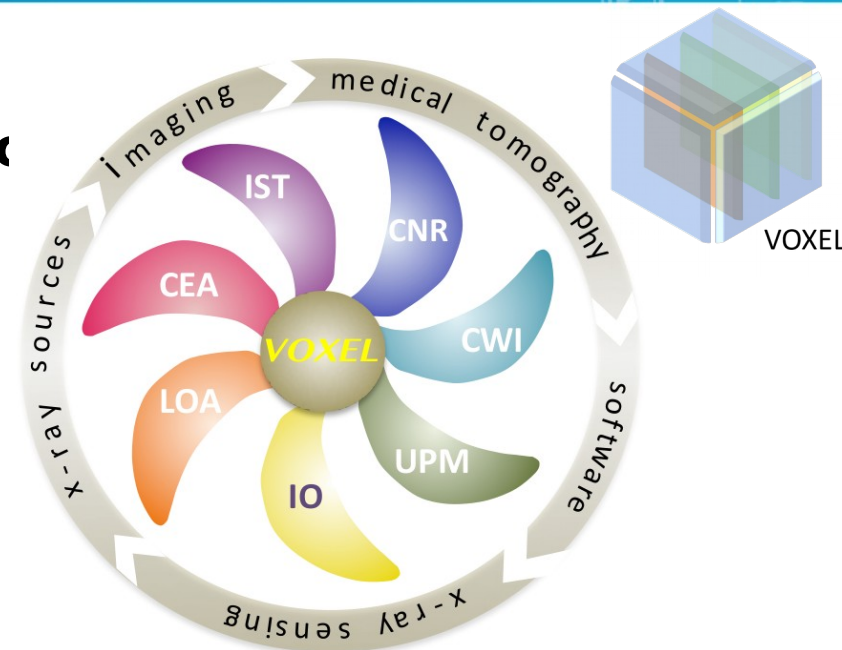
- **Mathematics/Computing Science**
- **Theoretical Physics**
- **Applied Physics/Optics**
- **Medicine**
- **Business (through 1 SME)**

## **II. 5 EU countries (inclusiveness)**

## **III. Gender issues: 2 female PI (coordinator)**

## **IV. Excellency**

- **Experienced researchers (FP6-NEST Adventure projects, COST actions...)**
- **ESR (FP7-IEF Marie Skłodowska Curie fellowship)**







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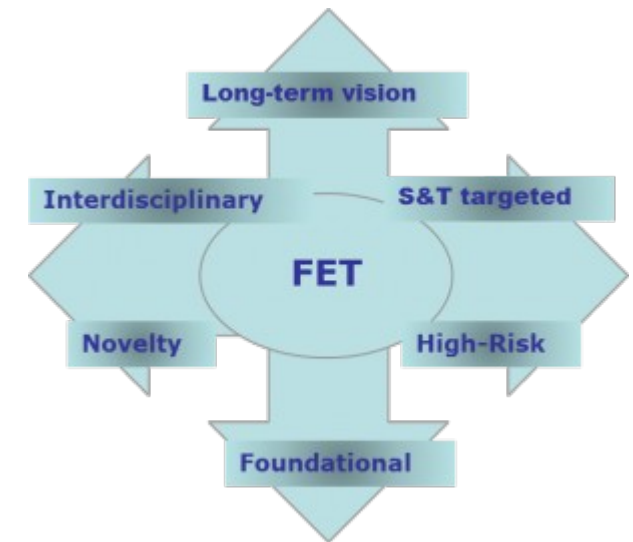
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**I. Attract the reader since the very first moment.**

**II. Answer all the topics of the template...**

**III. And the topics the referees have to judge!**



[http://ec.europa.eu/translation/writing/clear\\_writing/how\\_to\\_write\\_clearly\\_en.pdf](http://ec.europa.eu/translation/writing/clear_writing/how_to_write_clearly_en.pdf)



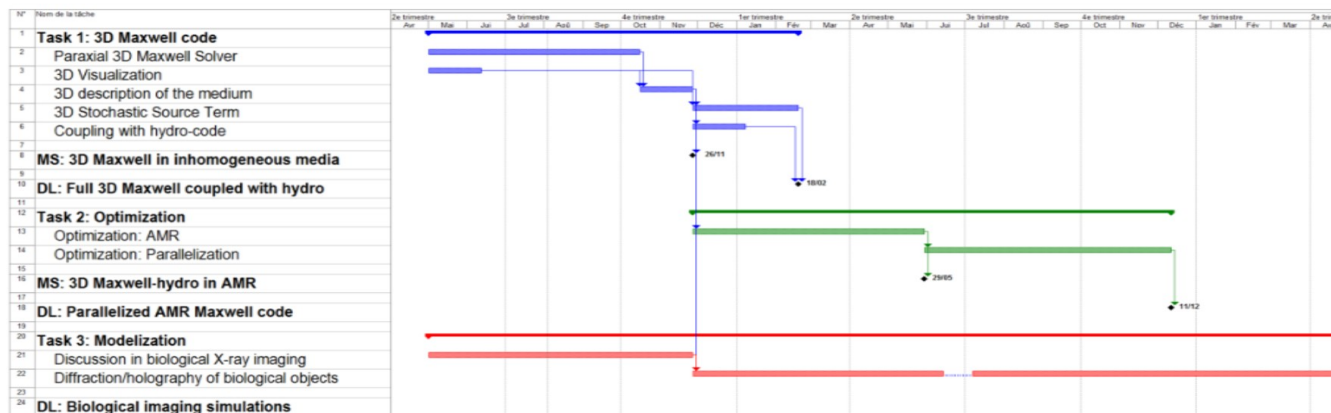
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## Writing the proposal



### I. It is a project:

- **PERT & GANTT charts**
- **Credible work plan, with appropriate milestones and deliverables**
- **Identify strengths and risks (this should be a must) and propose strategies to mitigate them.**
- **Take into account potential users/business plan**





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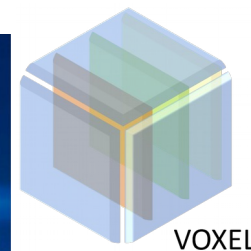
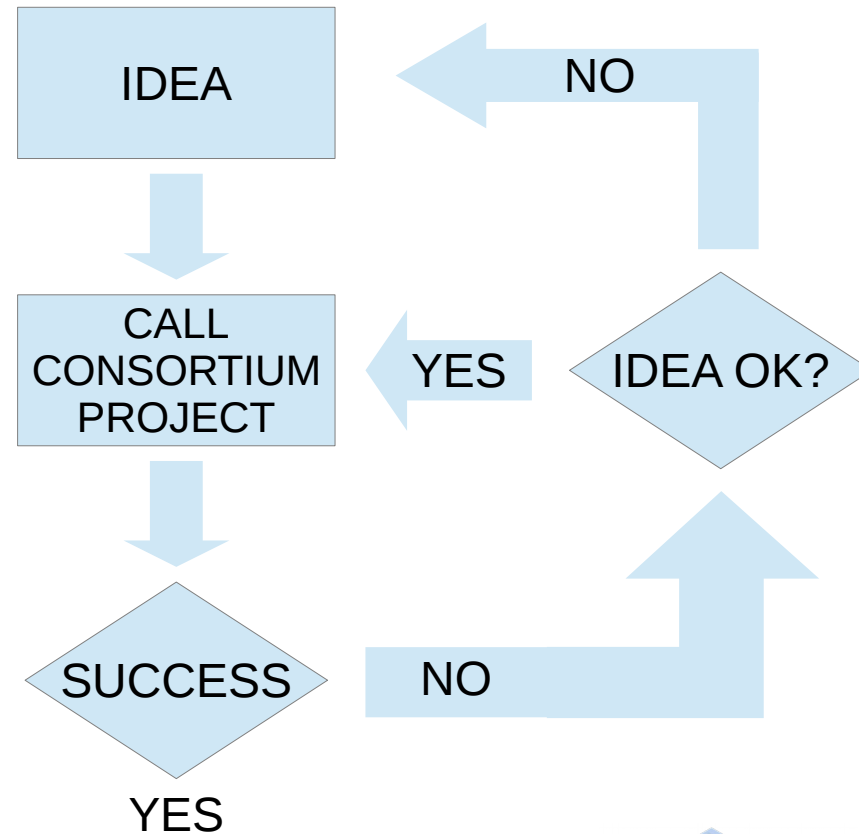


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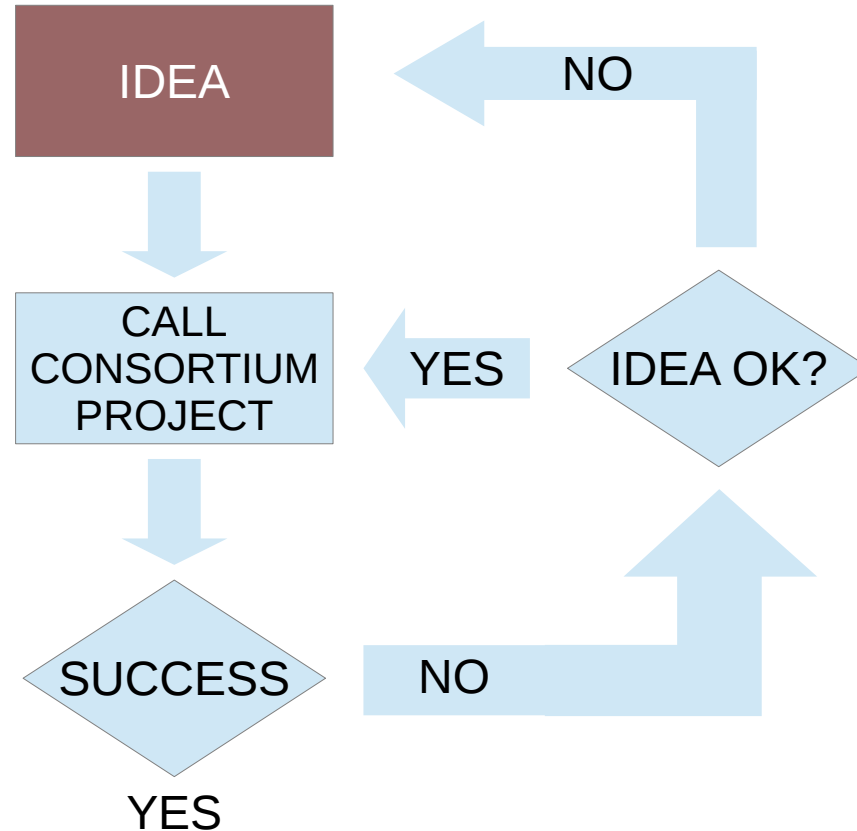
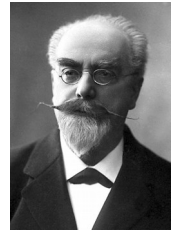
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Extend Lippman's  
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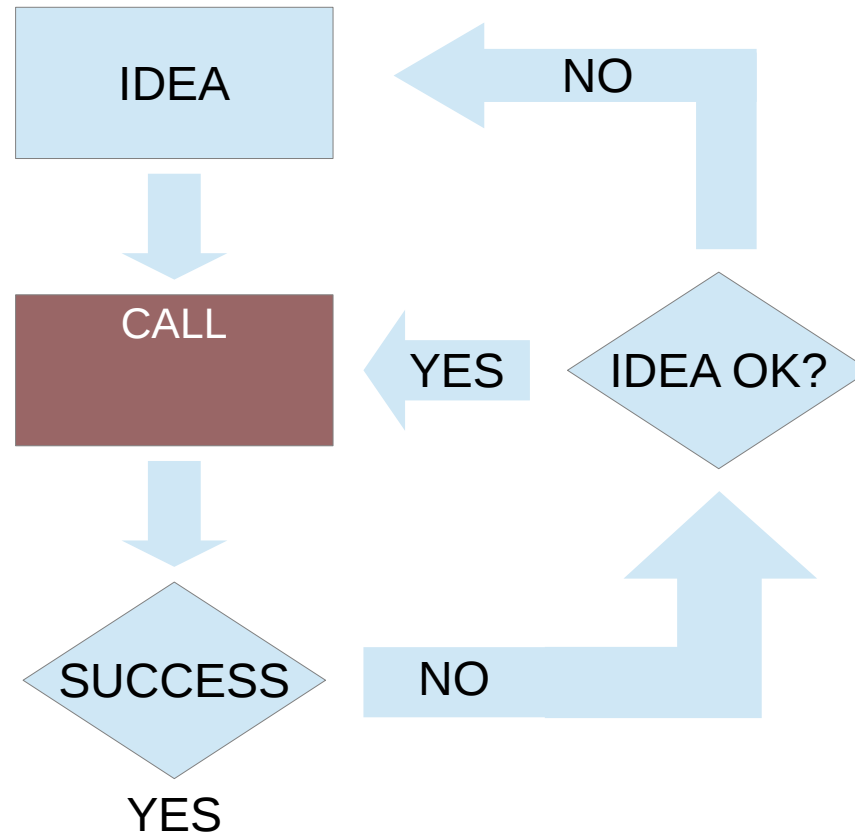
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Photonics KET  
disruptive approaches  
in sensing





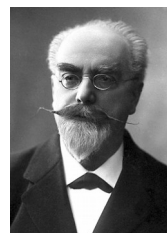
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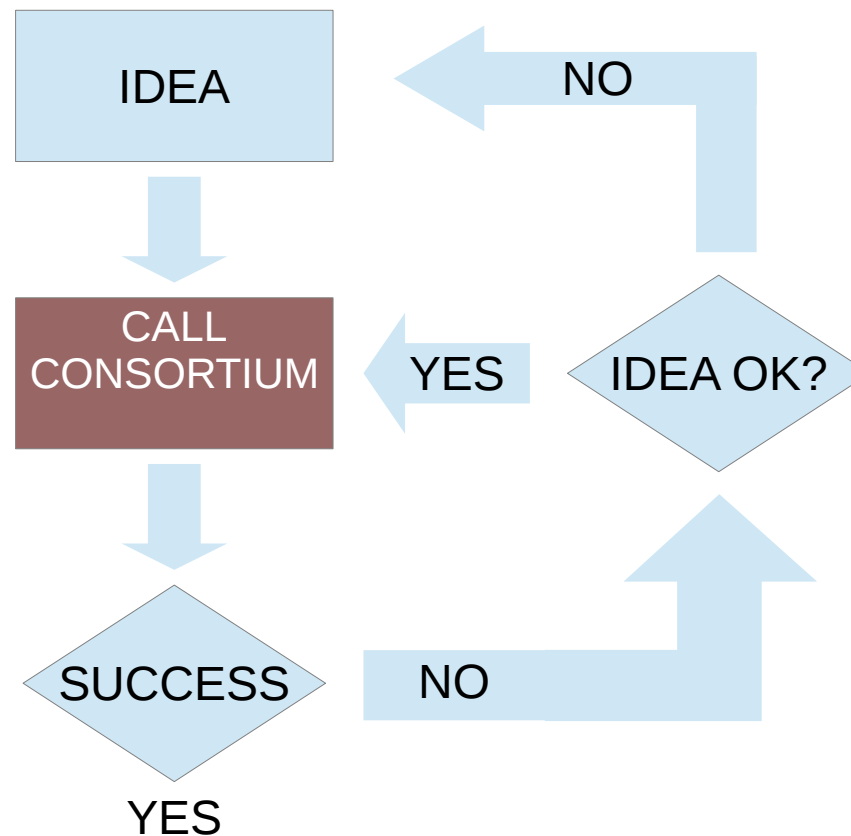
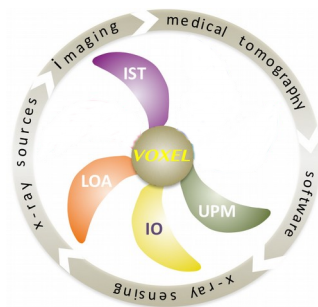


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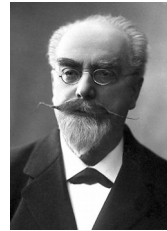
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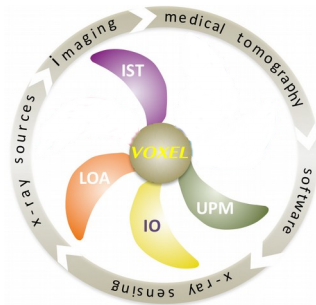


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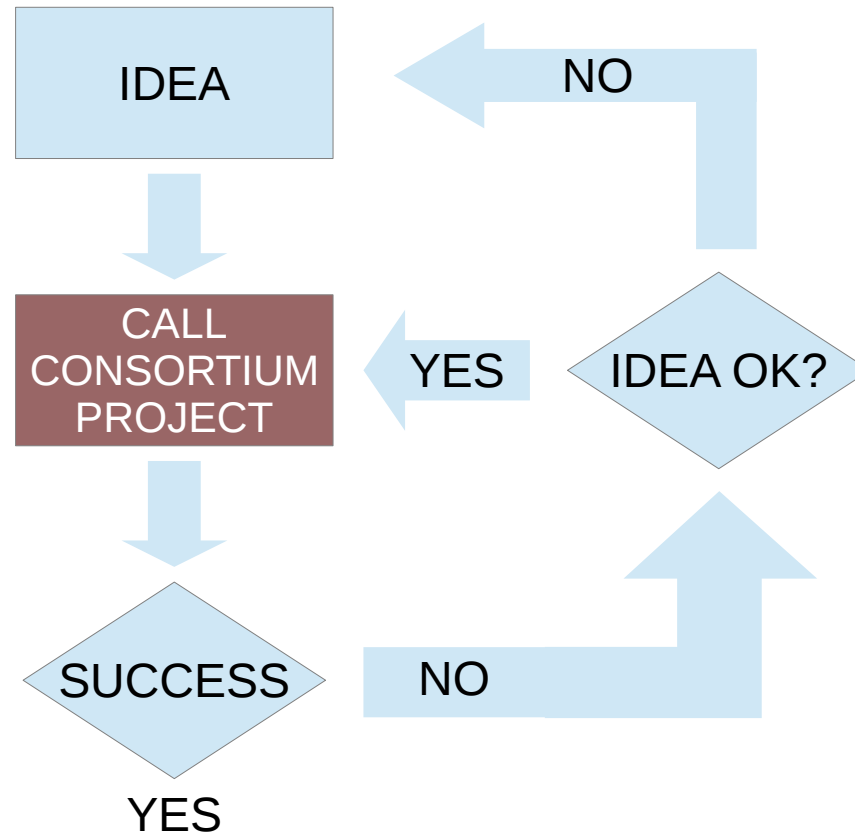


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NEXUS

Next 3D X-ray imaging with  
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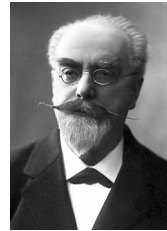
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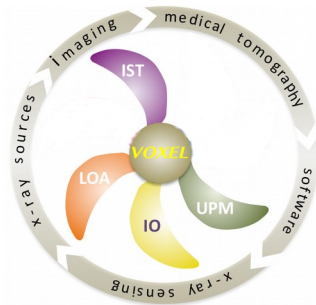


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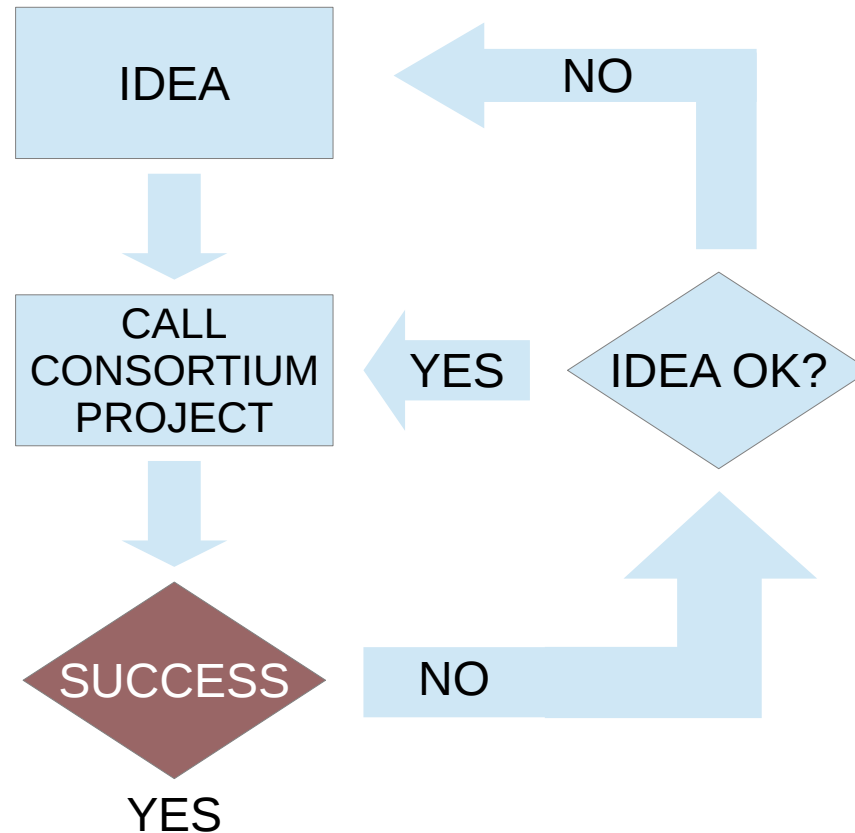


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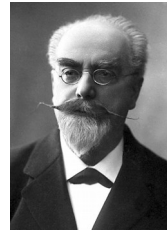
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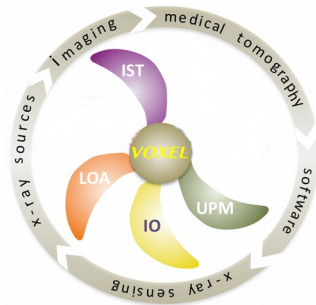


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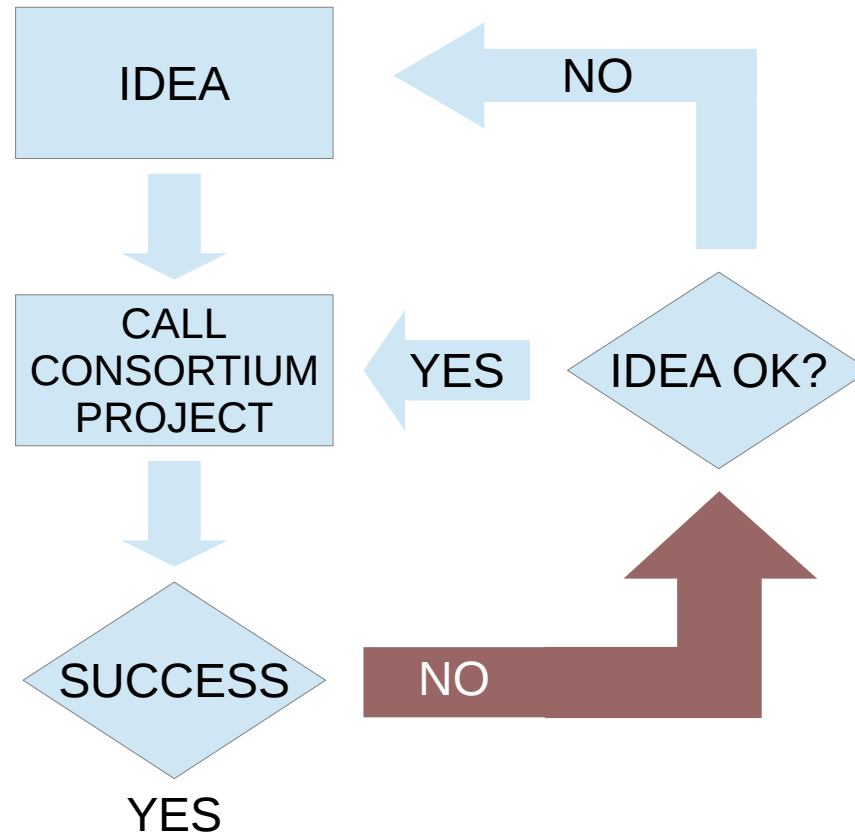


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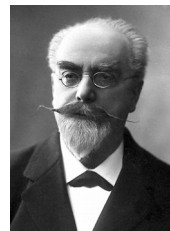
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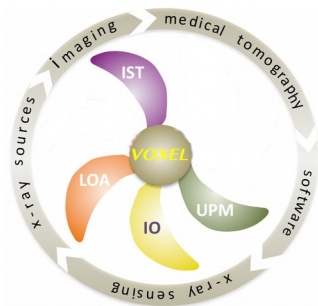


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IDEA

CALL  
CONSORTIUM  
PROJECT

SUCCESS

YES

NO

YES

IDEA OK?

Referees/NCP feedback  
Groundbreaking idea  
High risk / high impact

NO

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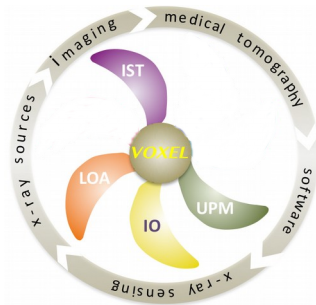
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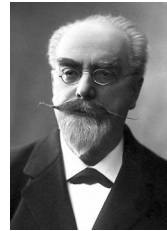
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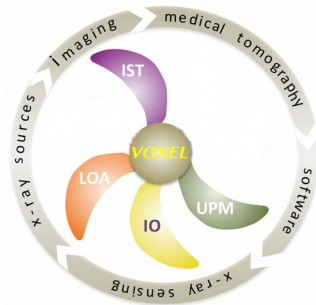
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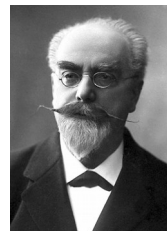
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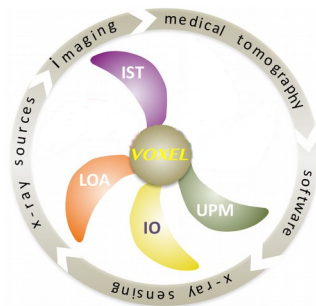


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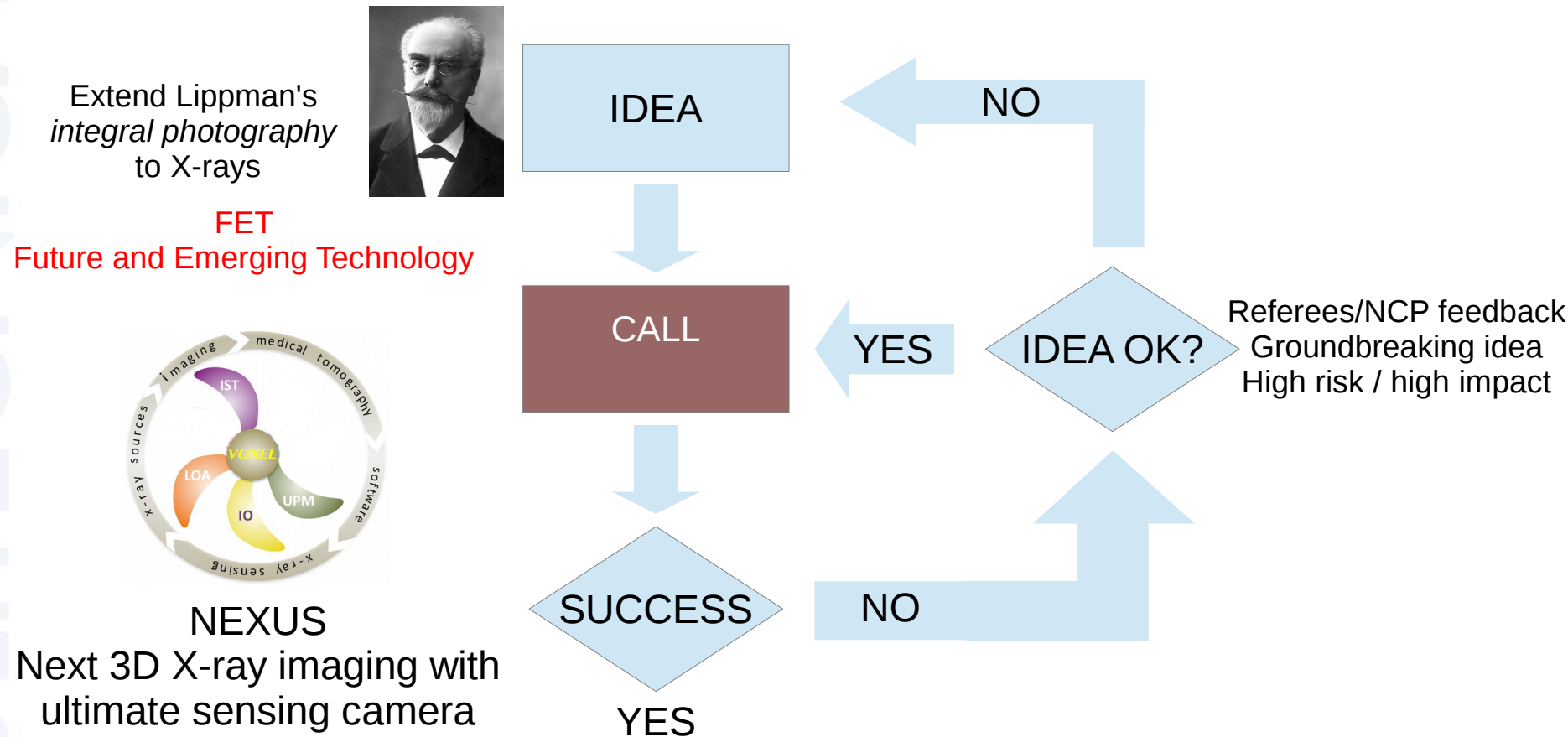


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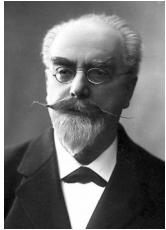
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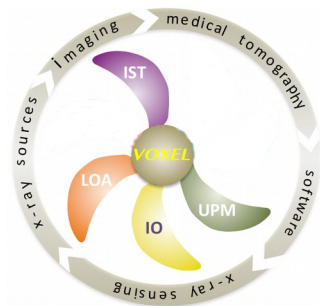


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FET  
Future and Emerging Technology



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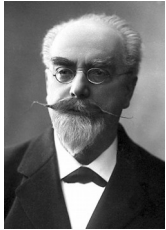
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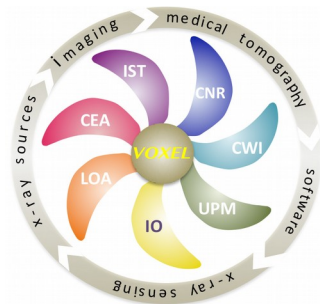


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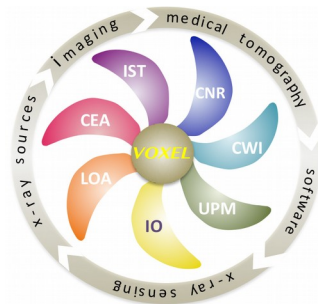
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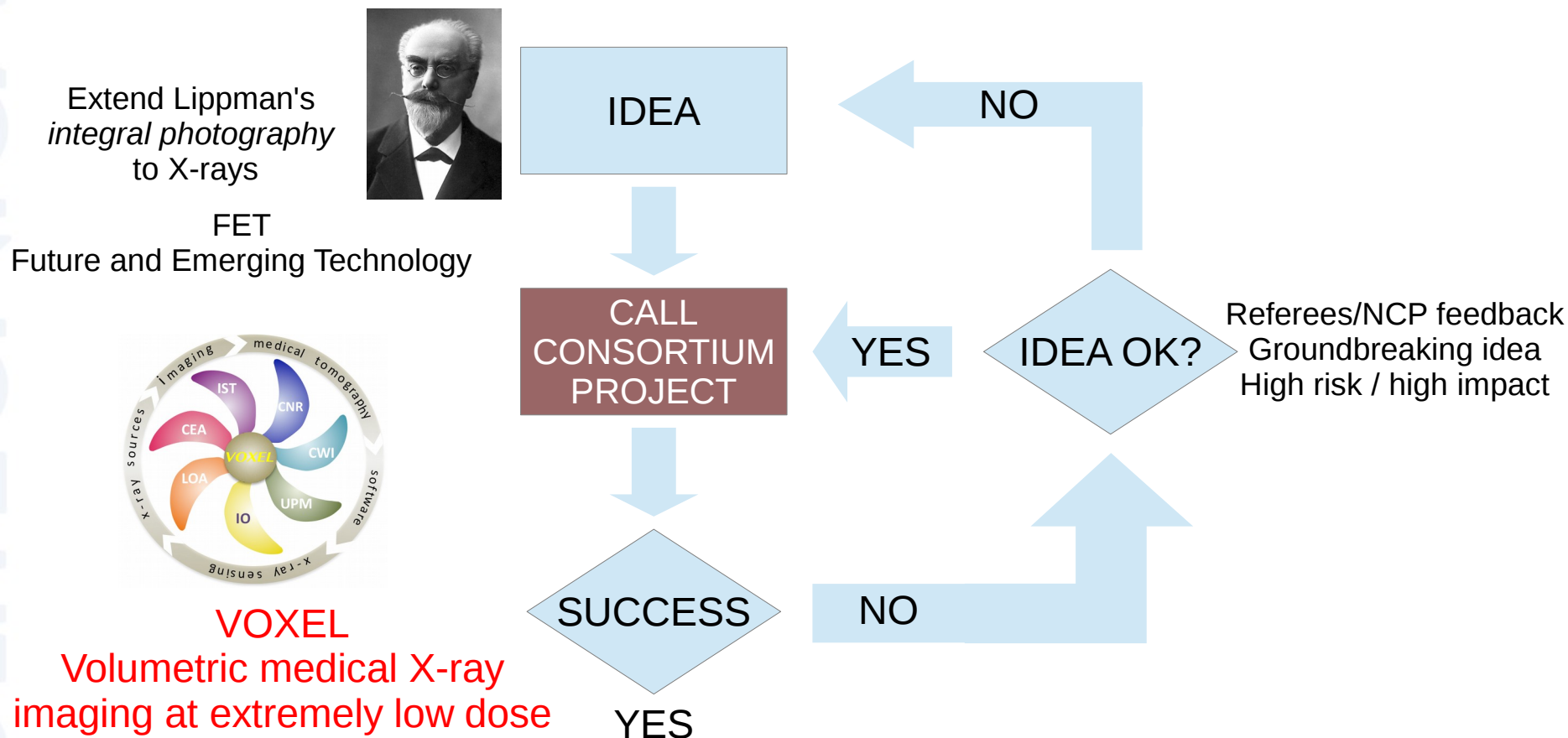


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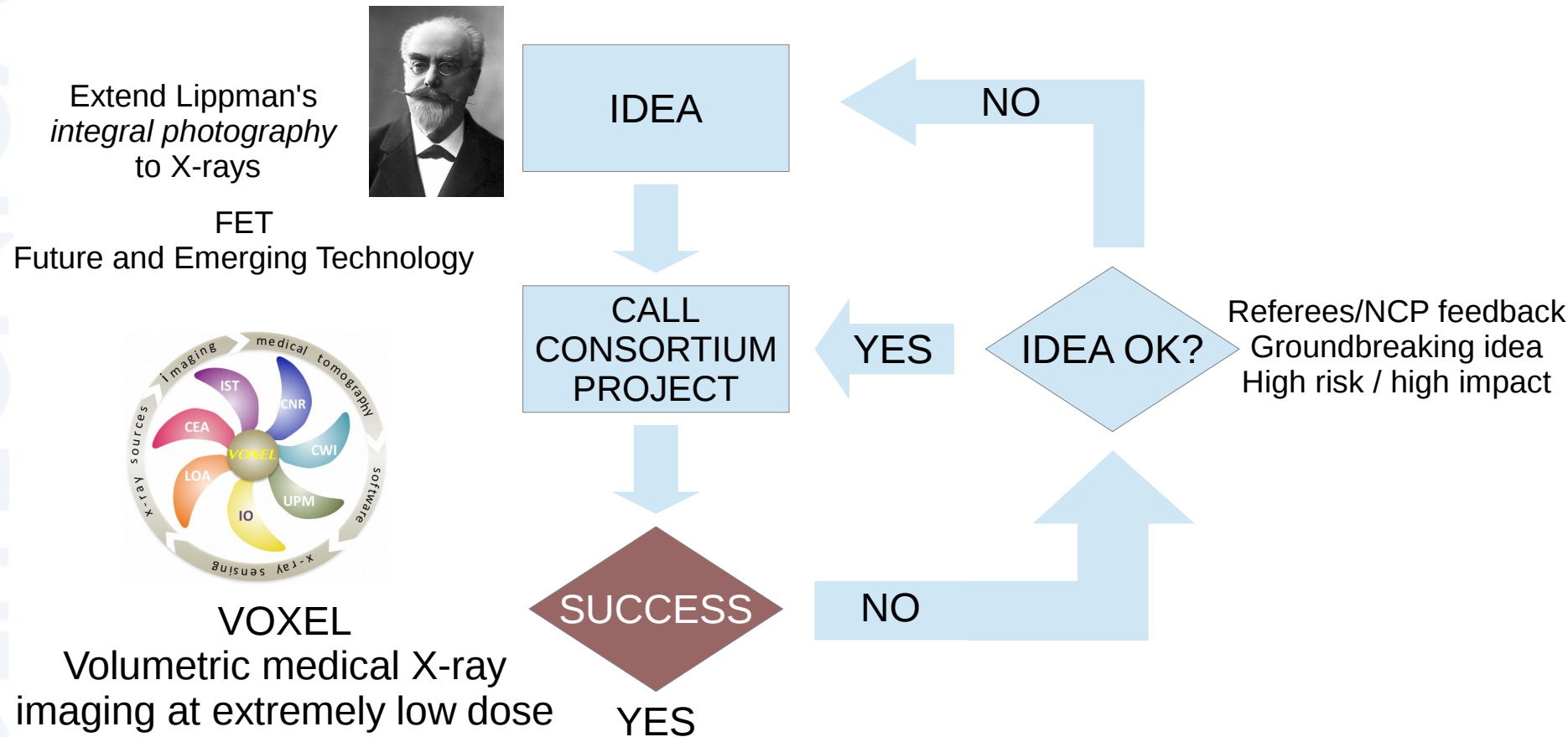


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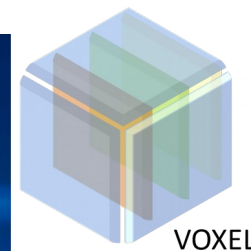
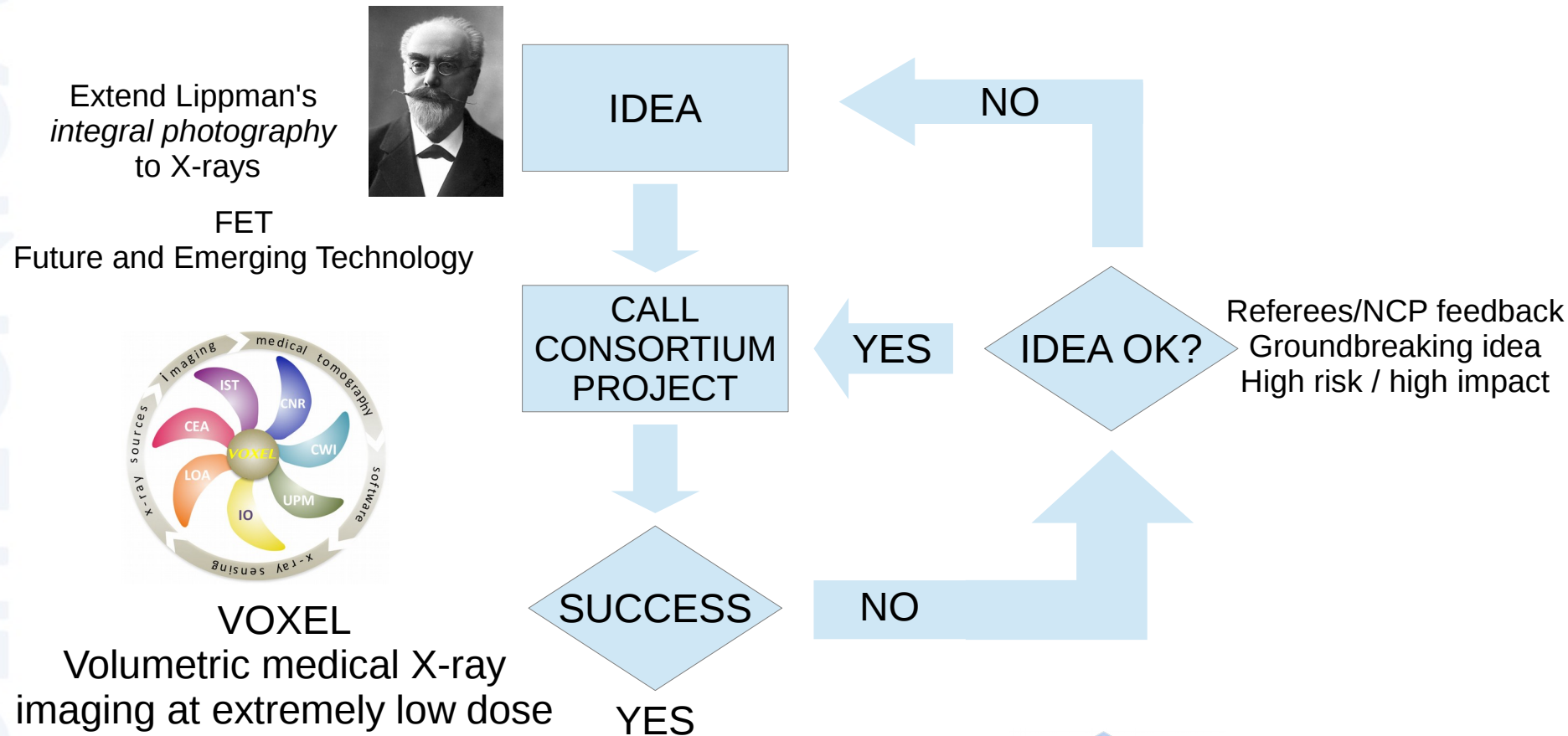


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VOXEL





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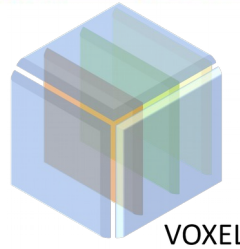
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## **I. Job stability (kind of): four year project.**

**It will allow me to continue working after finishing my Marie Skłodowska-Curie IEF**







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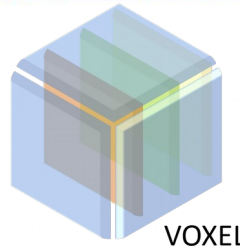
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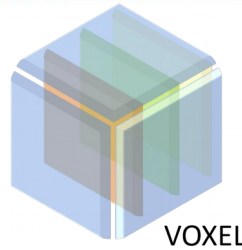
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**III. Collaboration is a must in FET projects**

- **Multidisciplinary projects**
- **Excellent partners**
- **It enhances the probabilities of obtaining new contracts**
- **My case: tight collaboration with CWI Amsterdam (mathematics and computer science) and LOA/IO (X-ray optics)**



# CONCLUSION



- I. Writing a successful FET proposal is a very difficult but rewarding task**
- II. It is an iterative project**
- III. Take advantage of any opportunity to improve the consortium (i.e. COST actions, conferences...)**
- IV. Hear the story from VOXEL coordinator (Dr. Marta Fajardo, IST, Pt)**

**H2020 FET-Open information day Brussels July 6-2015**

<http://webcast.ec.europa.eu/eutv/portal/archive.htmlviewConference=24997&catId=24983>



**Questions?**



**VOXEL**