

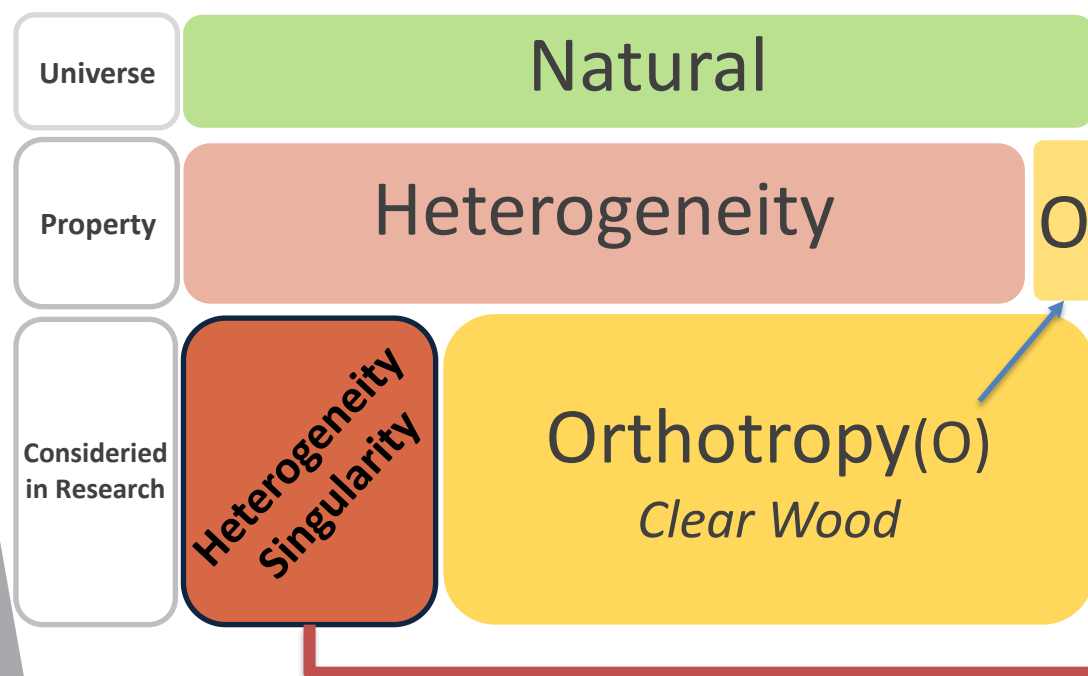
# Beyond « Clear Wood »: Exploring the Structure-Properties of Figured Woods and of Woods with Strong Gradients Selected in Craftsmanship

HU Hsien-Tsung

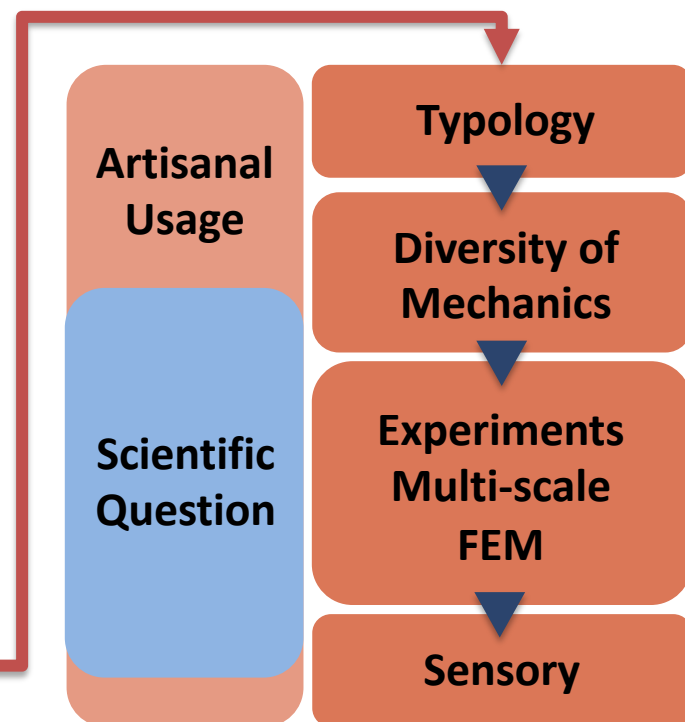
CABROLIER Pierre, ALKADRI Ahmad, CARLIER Capucine, GRIL Joseph, LANGBOUR Patrick, BREMAUD Iris



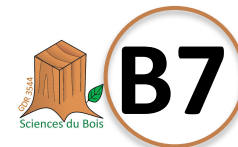
## Background



## Work Plans



# The Preliminary Impression for the Methodology to Approach the Intention



Physical

MFA  
Grain  
direction

Theoretical  
&  
Numerical

Mechanical tests  
*Micro-specimen*

Quantifying the ratio of  
with/without  
figured part by  
optical measurement

**Mechanical  
Tests**  
*Large specimen*

Multiscale

Describing the  
characteristic of the  
figured wood

Transforming the  
mechanical properties  
from **Local** to **Global**

**Finite  
Element  
Model**