

Plant tendril writhing under external load : where Kirchhoff meets Lockhart

Émilien Dilly^{1,†}, Sébastien Neukirch⁴, Julien Derr² and Dražen Zanchi³

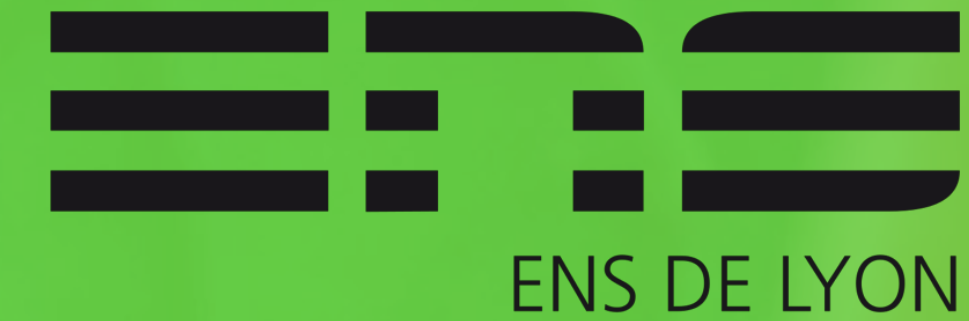
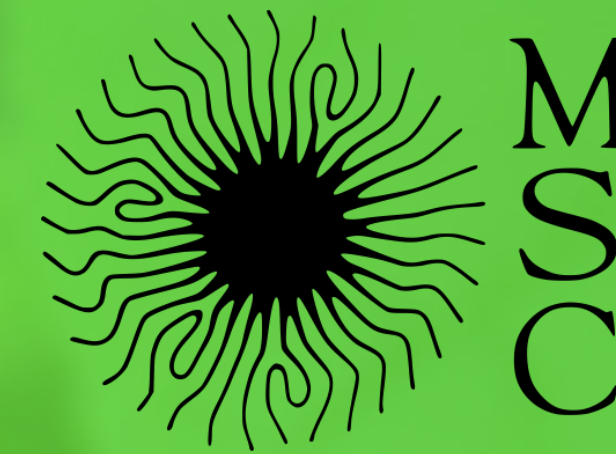
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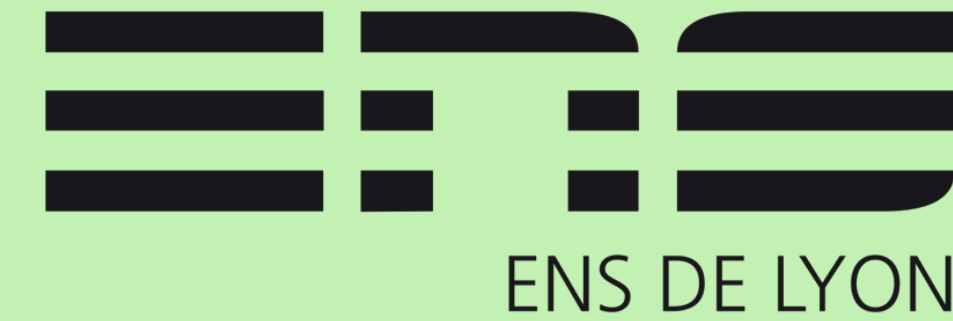
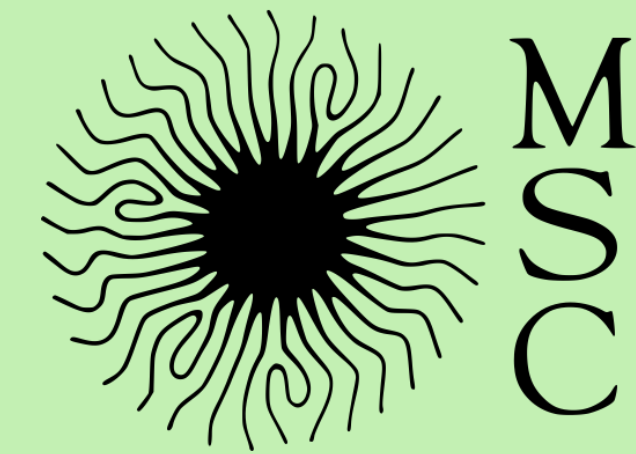
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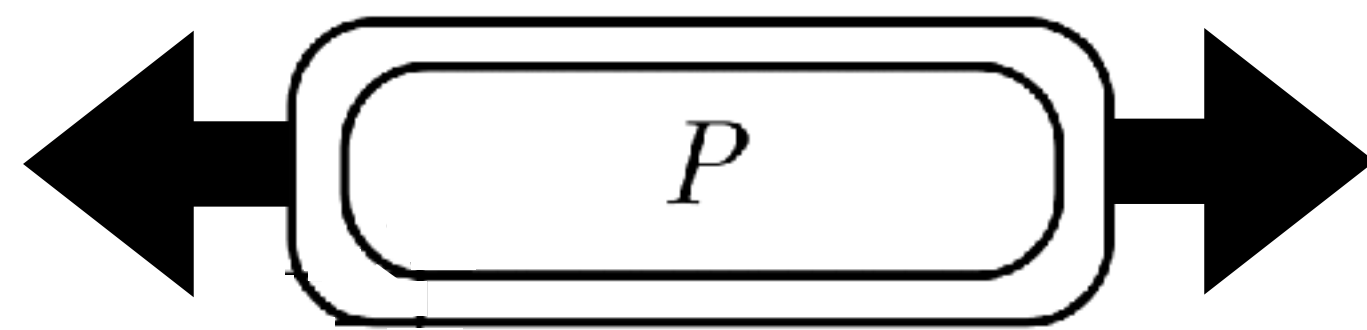
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LOCKHART
1965

PLANT CELL

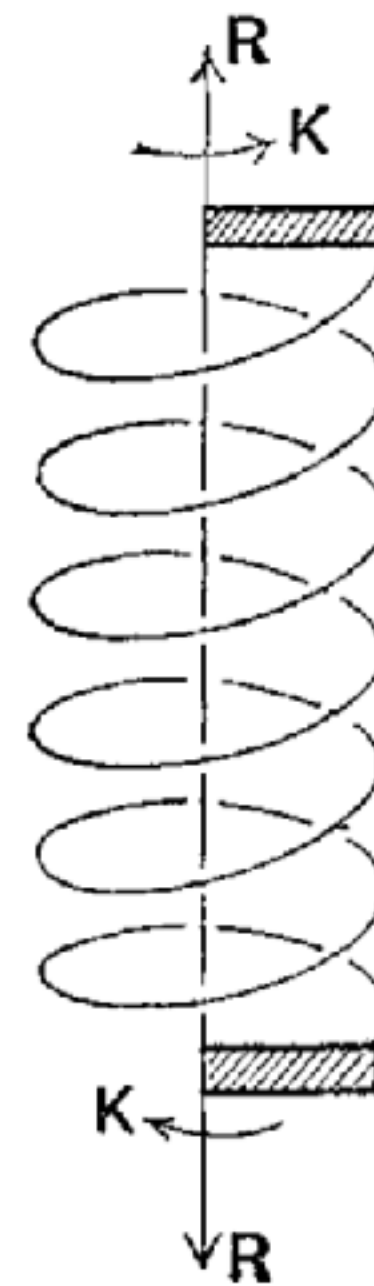


IRREVERSIBLE GROWTH

THE LESS THE CELL IS STRETCHED
THE SLOWER IT GROWS

KIRCHHOFF
1859

Theory of spiral springs*.



LOVE 1892

EMBRACE OF THE TWO
UNDER THE VINES

