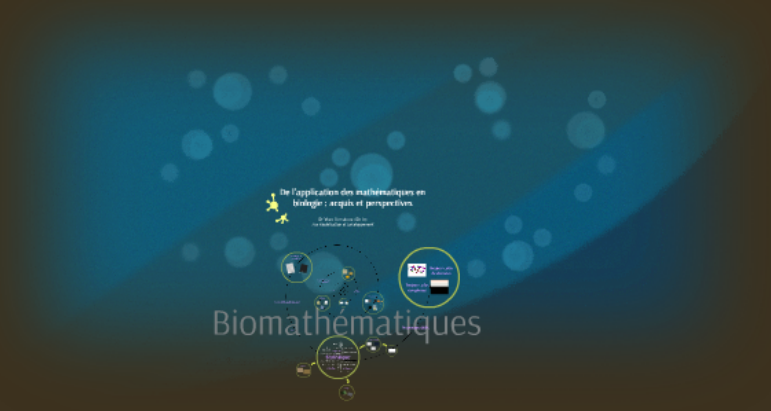
Merci de votre attention

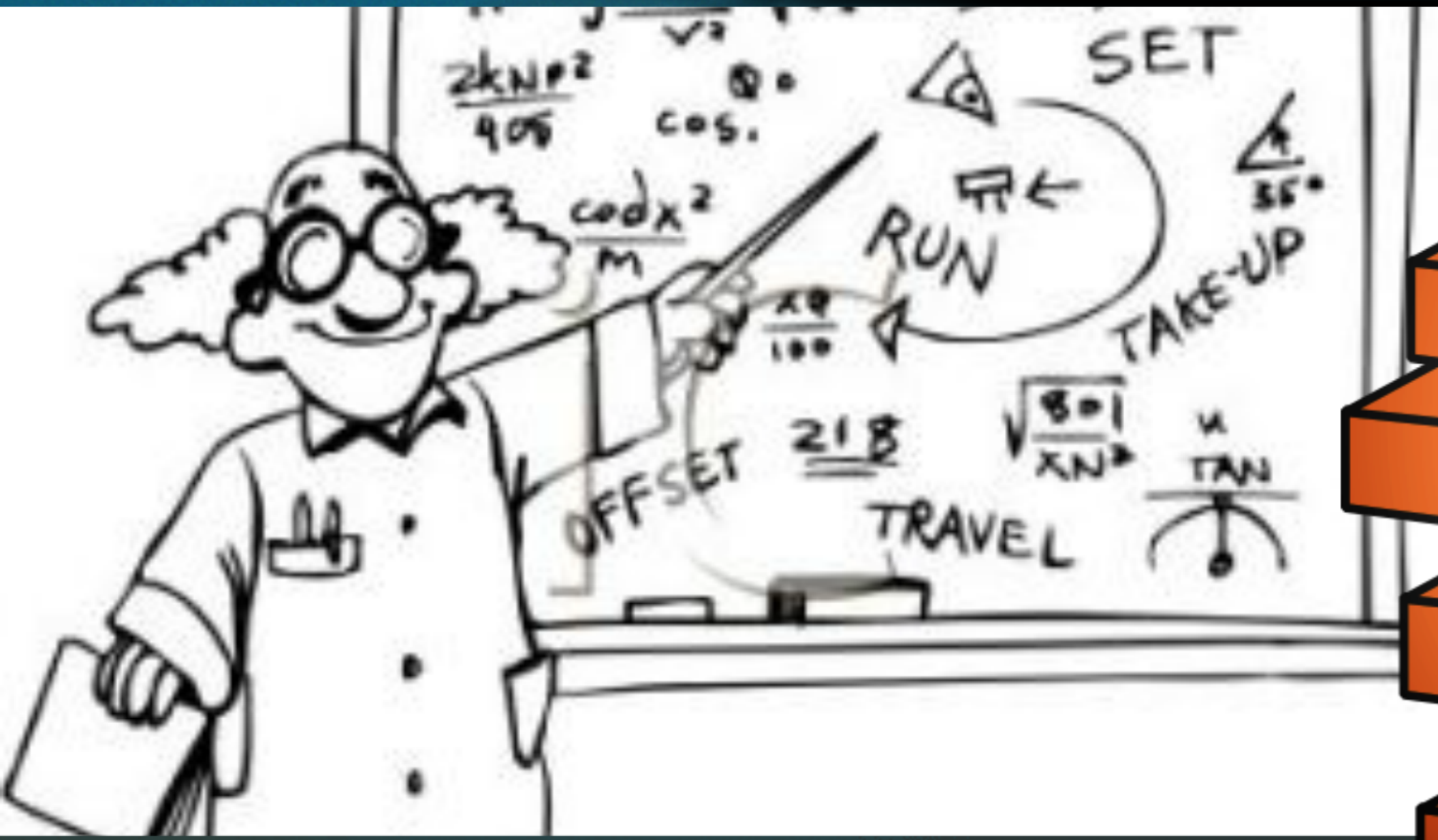


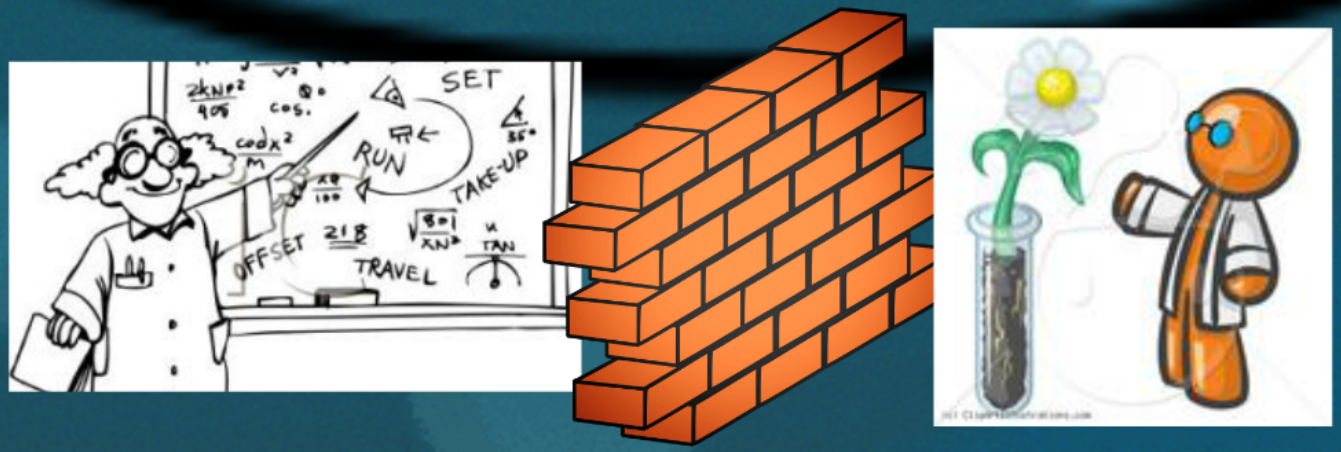
De l'application des mathématiques en biologie : acquis et perspectives

Pr Yves Brostaux (Dr Ir)
Axe Modélisation et Développement
Gembloux Agro-Bio Tech
Université de Liège

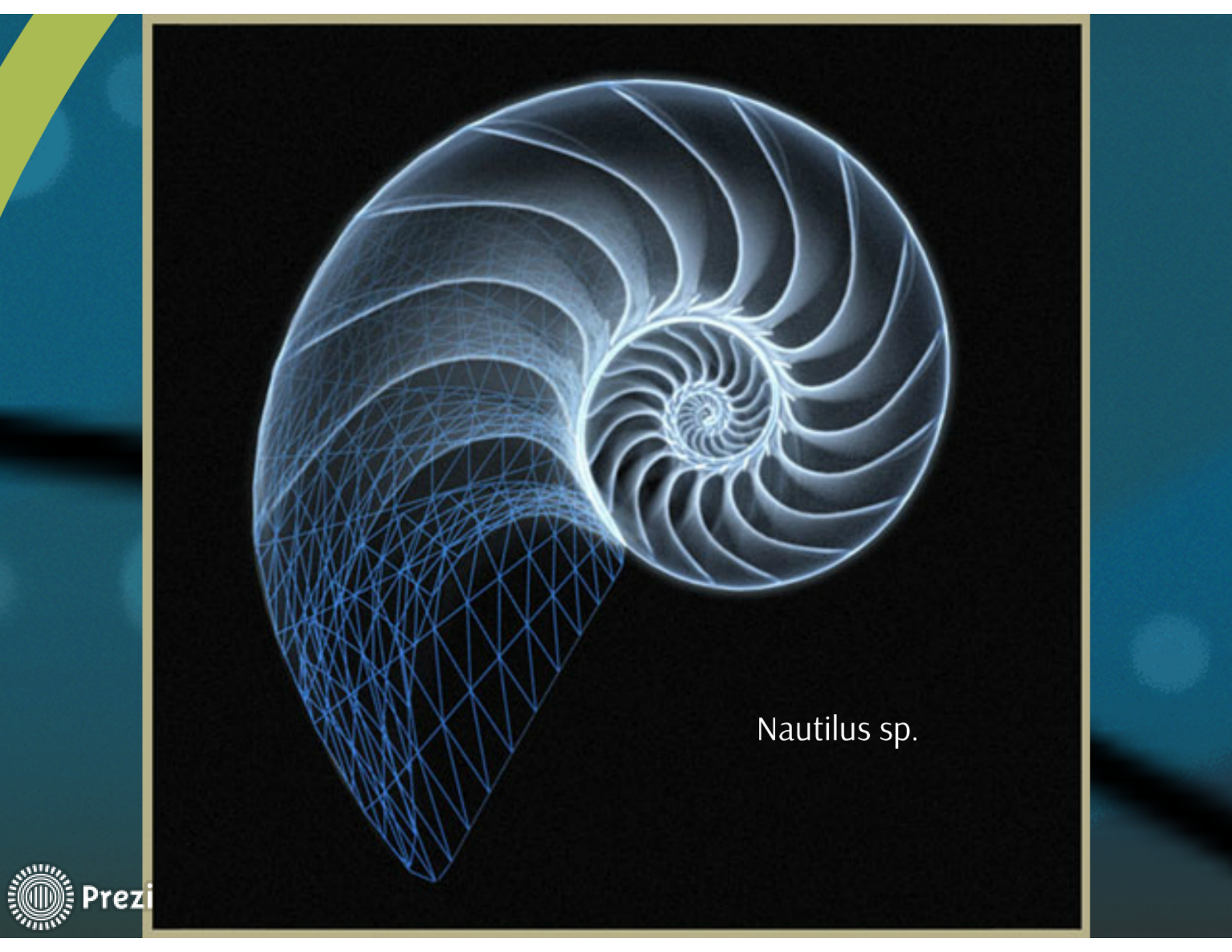
Génétique des populations

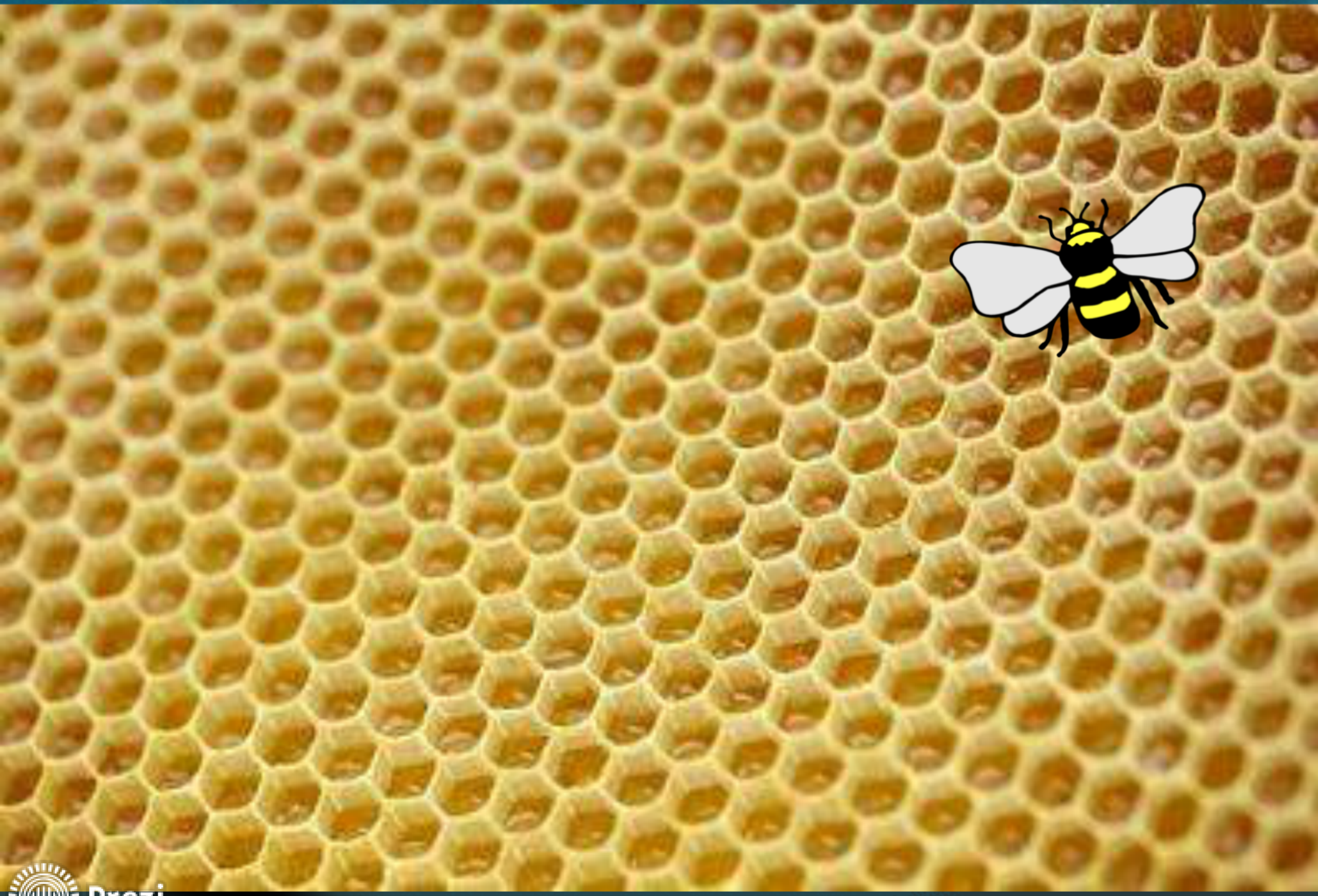
Math vs Biologie

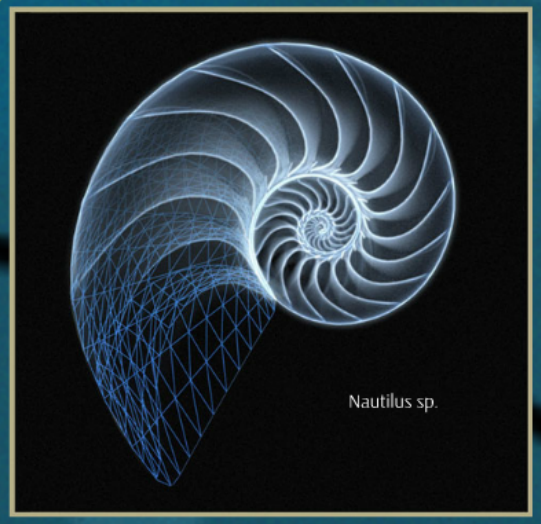


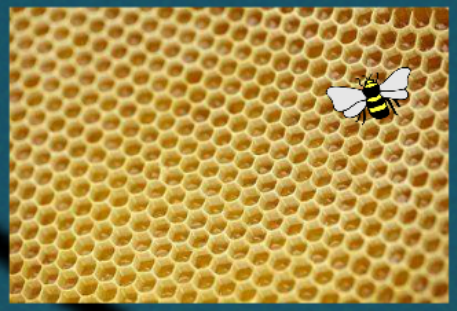


Nature et mathématiques


Nautilus sp.

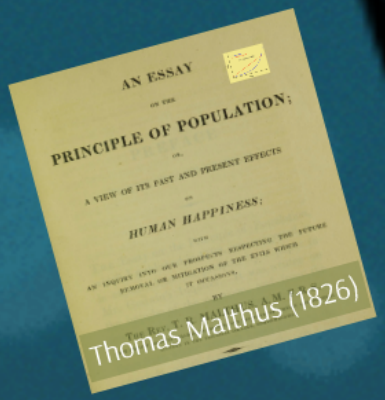


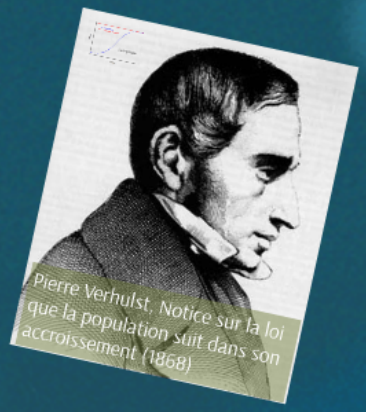




Un outil de description du monde vivant

Dynamique des populations





AN ESSAY

ON THE

PRINCIPLE OF POPULATION;

OR,

A VIEW OF ITS PAST AND PRESENT EFFECTS

ON

HUMAN HAPPINESS;

WITH

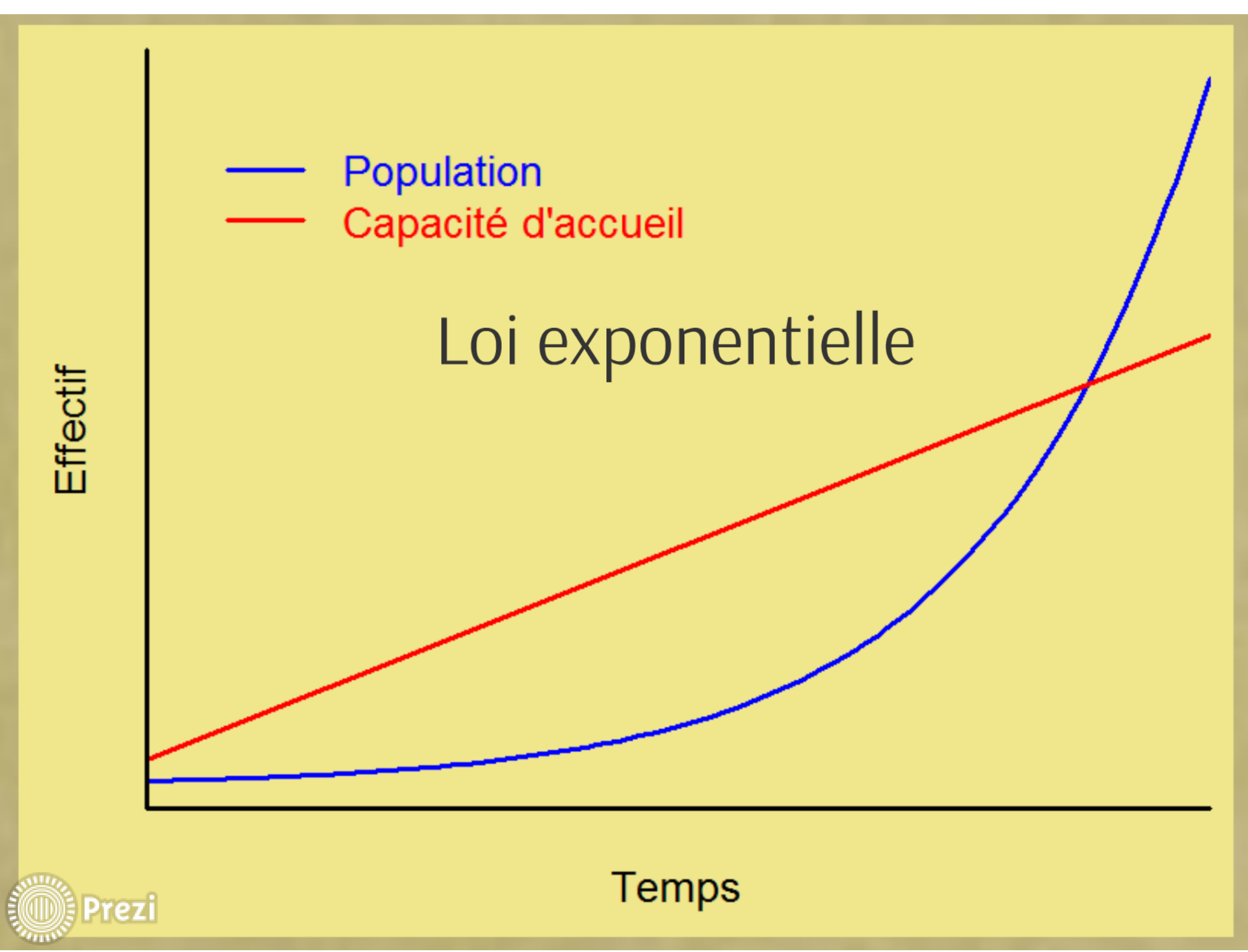
AN INQUIRY INTO OUR PROSPECTS RESPECTING THE FUTURE REMOVAL OR MITIGATION OF THE EVILS WHICH IT OCCASIONS.

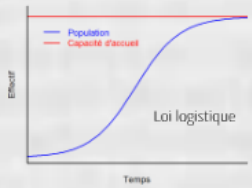
BY

THE REV. T. R. MALTHUS, A.M. F.R.S.

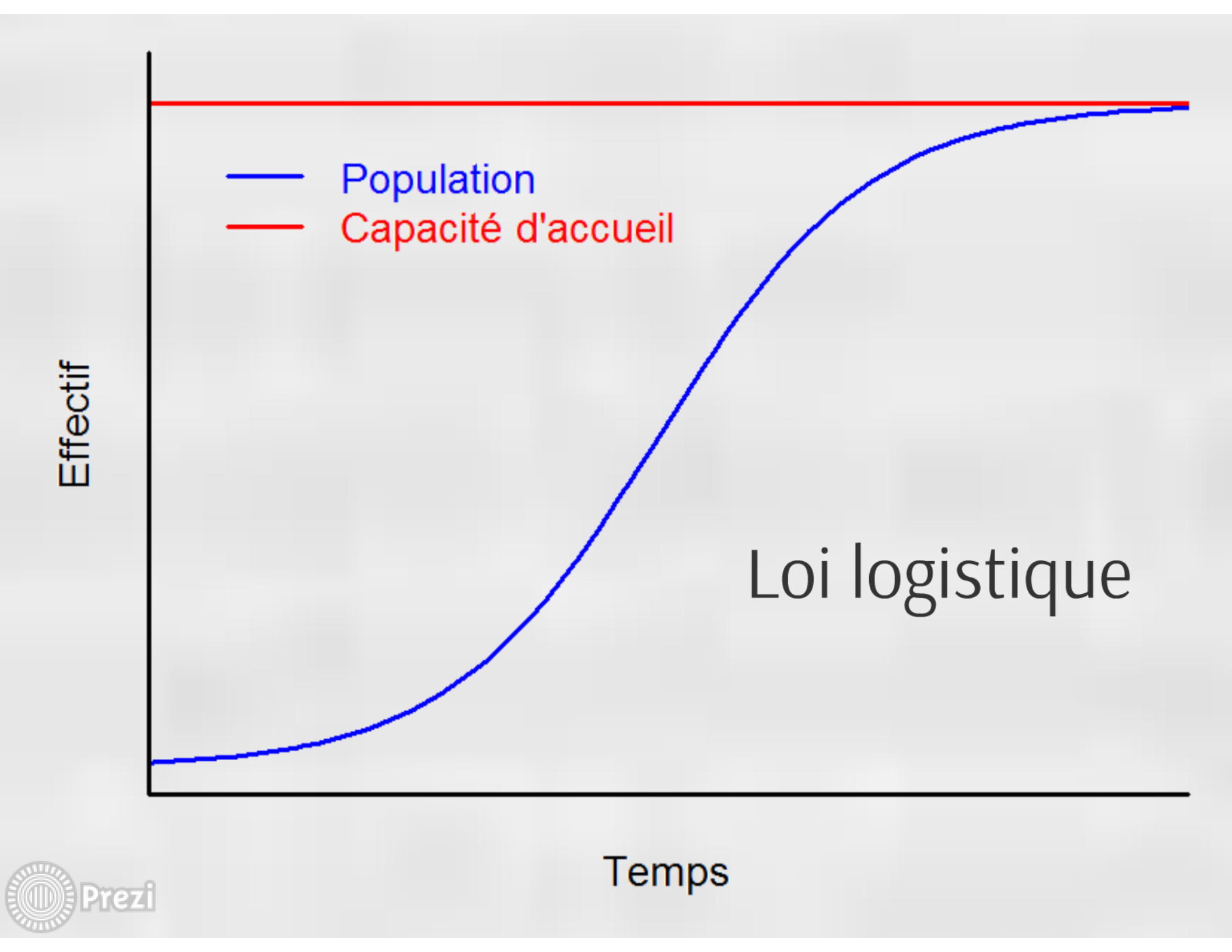
FORMERLY FELLOW OF JESUS COLLEGE, CAMBRIDGE, AND PROFESSOR OF HISTORY AND POLITICAL ECONOMY IN THE EAST-INDIA COLLEGE, HERTFORDSHIRE.

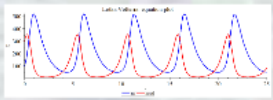
Thomas Malthus (1826)


Population
Capacité d'accueil
Loi exponentielle
Effectif
Temps

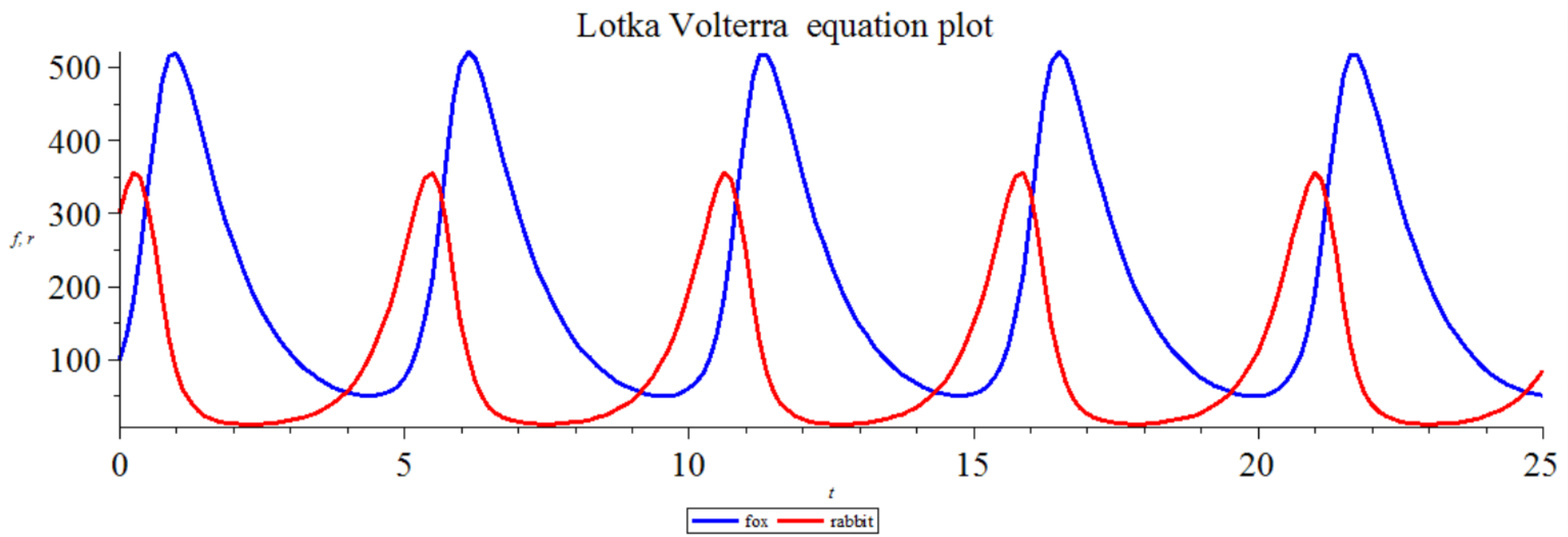


Pierre Verhulst, Notice sur la loi que la population suit dans son accroissement (1868)


Population
Capacité d'accueil
Effectif
Temps
Loi logistique



Lotka-Volterra (1925)


Lotka Volterra equation plot
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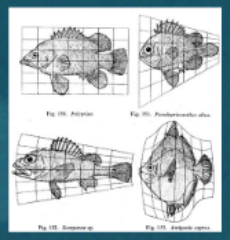
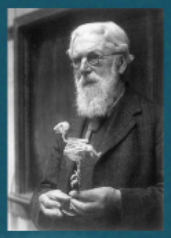
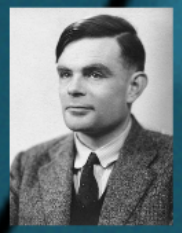
Morphogénèse





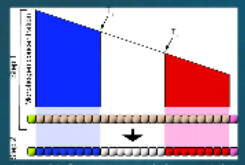
D'Arcy Wentworth - On Growth and Form (1917)



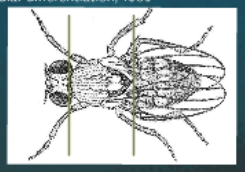
Alan Turing

The Chemical Basis of Morphogenesis (1952)

Lewis Wolpert



Positional information and the spatial pattern of cellular differentiation, 1969



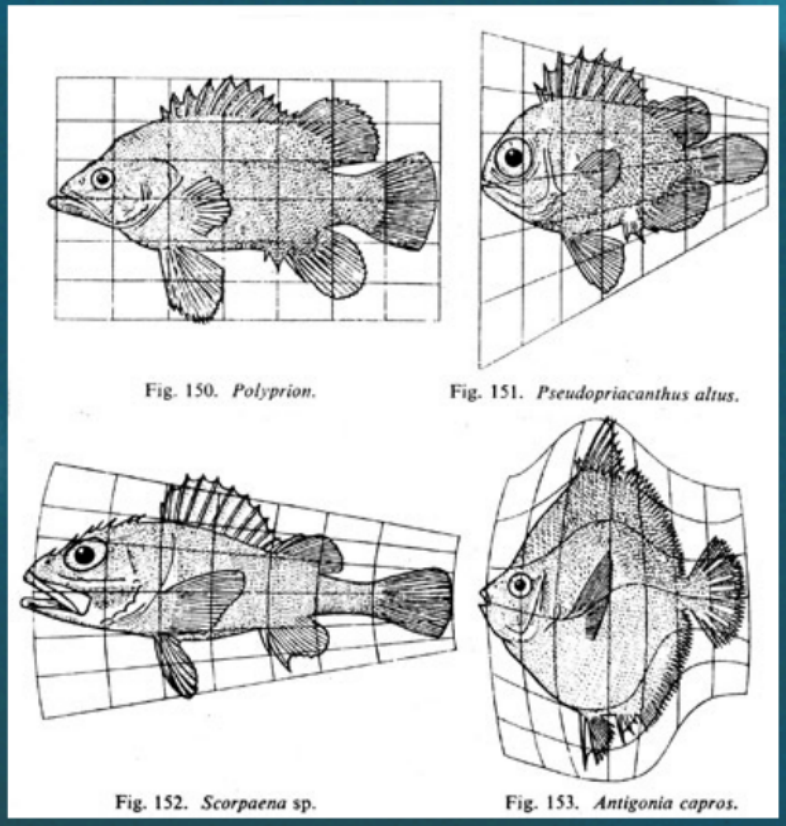
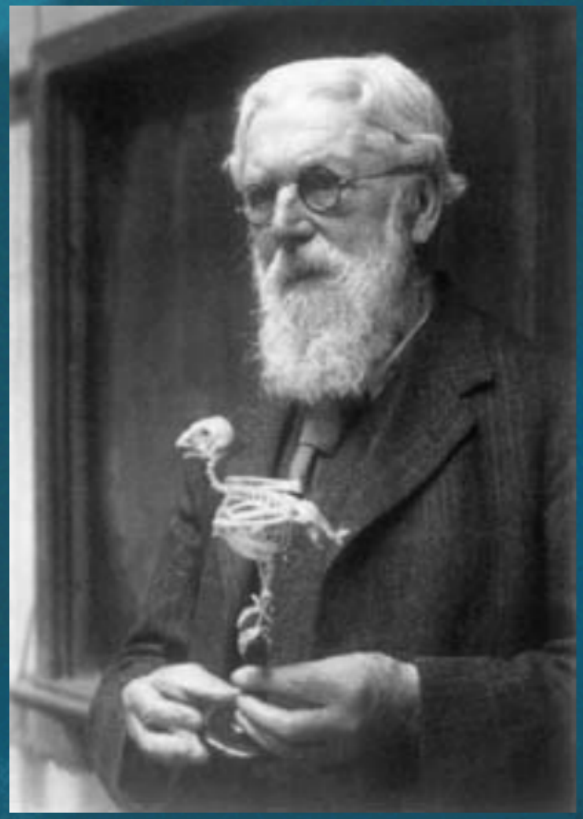


Fig. 150. *Polyprion.*

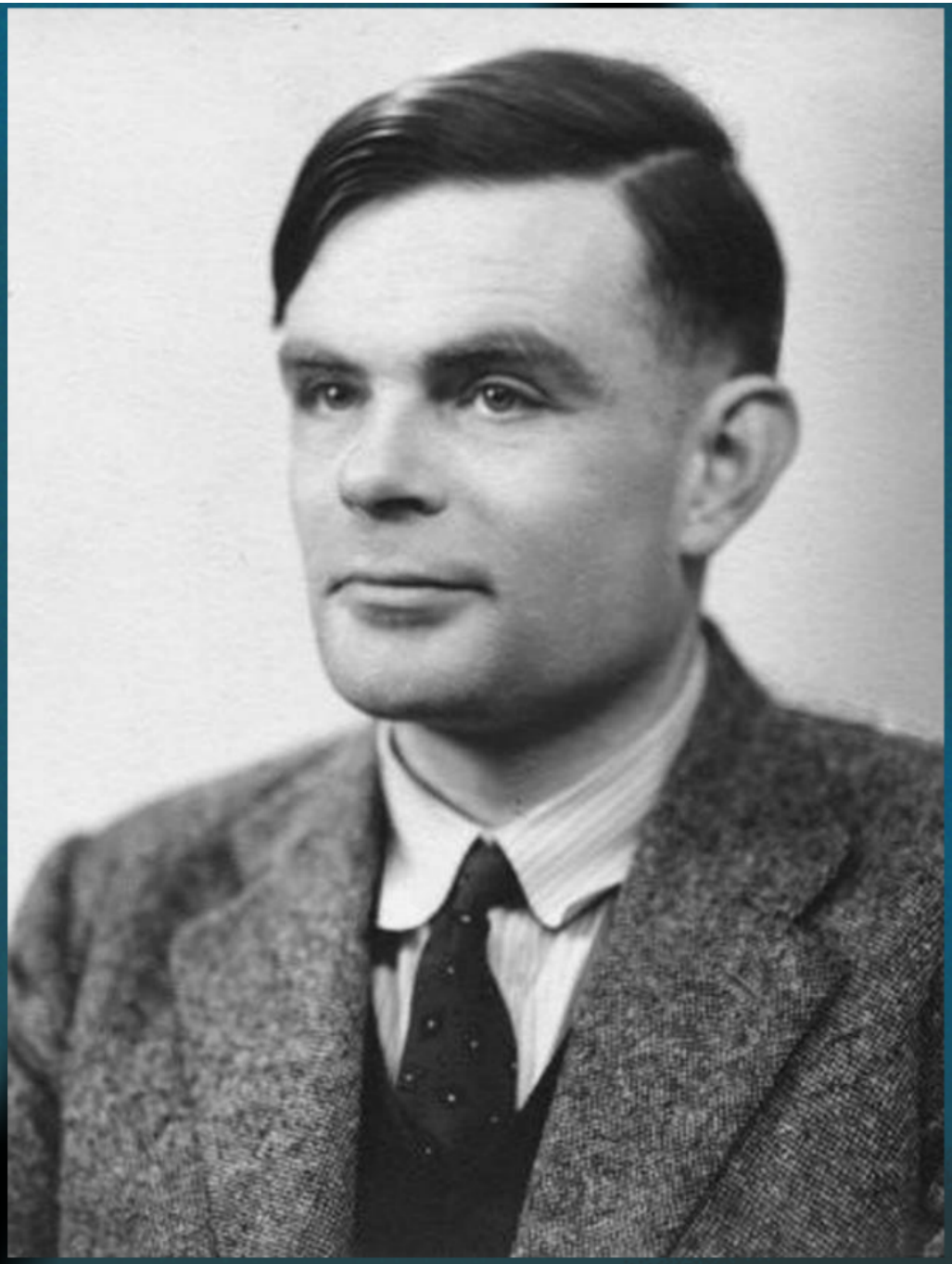
Fig. 151. *Pseudopriacanthus altus.*

Fig. 152. *Scorpaena* sp.

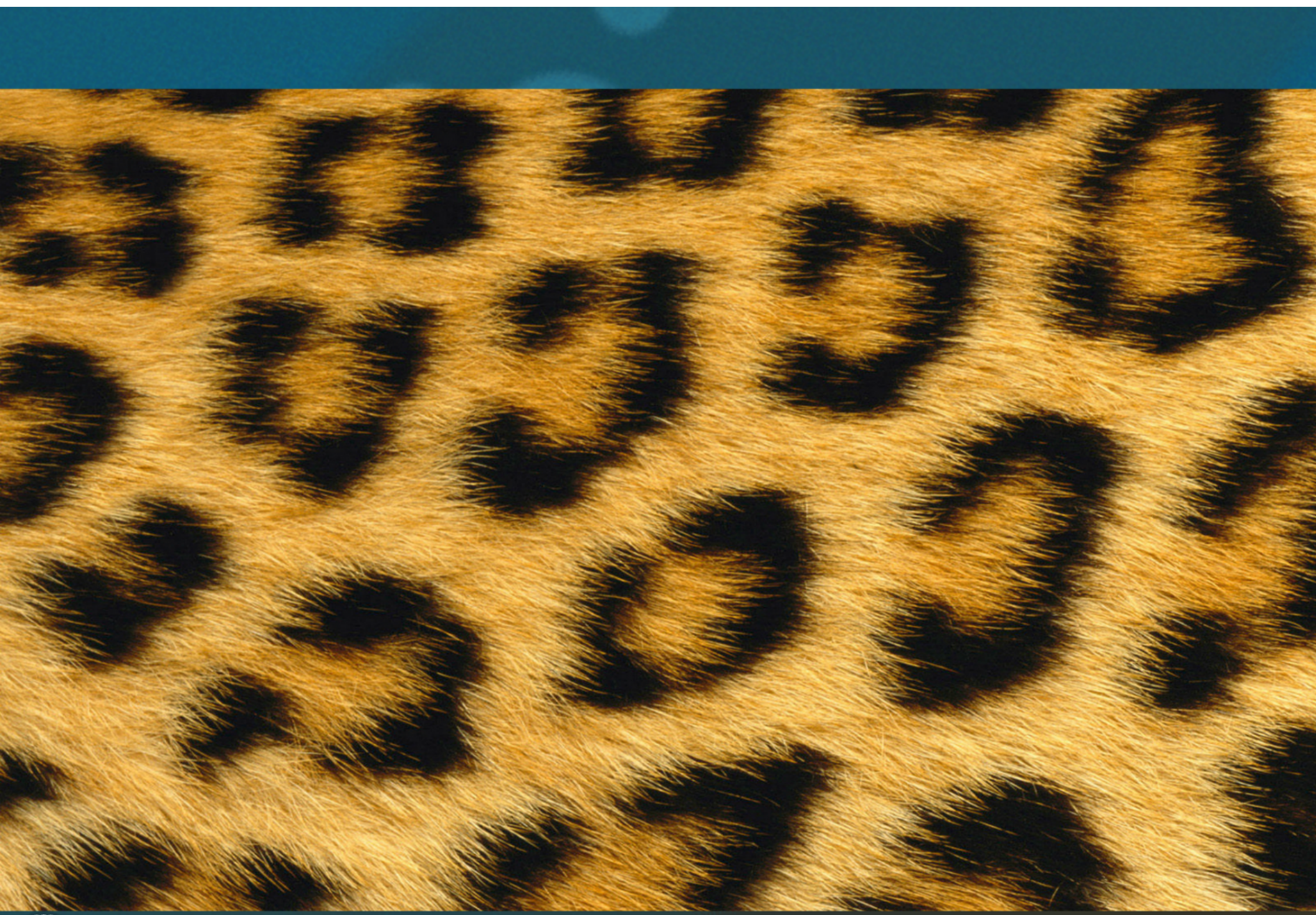
Fig. 153. *Antigonia capros.*



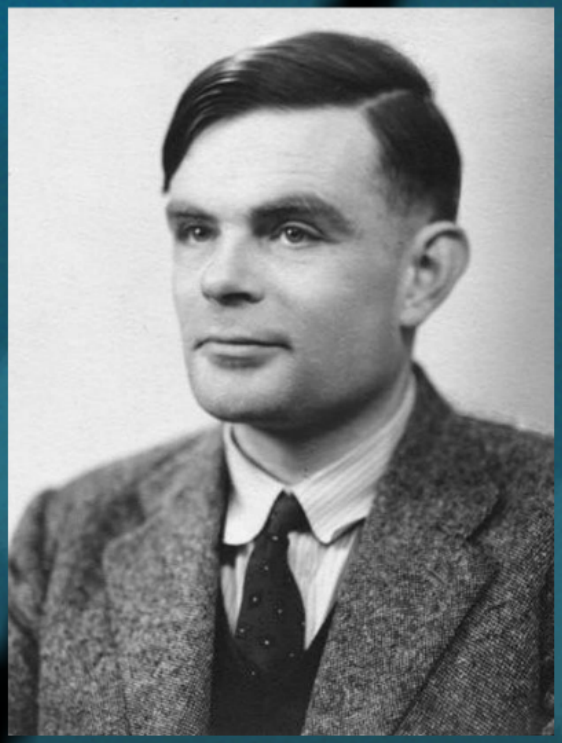
D'Arcy Wentworth - On Growth and Form (1917)



Alan Turing


Prezi


Prezi



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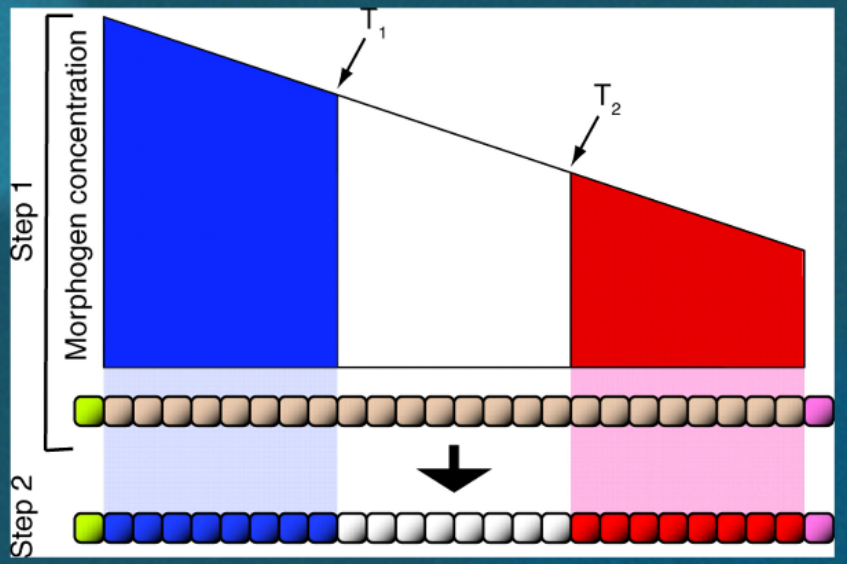

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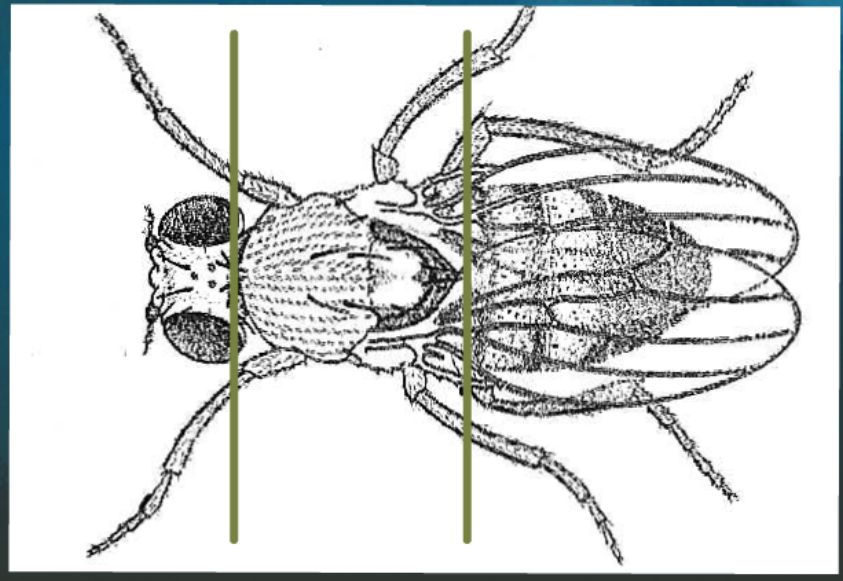
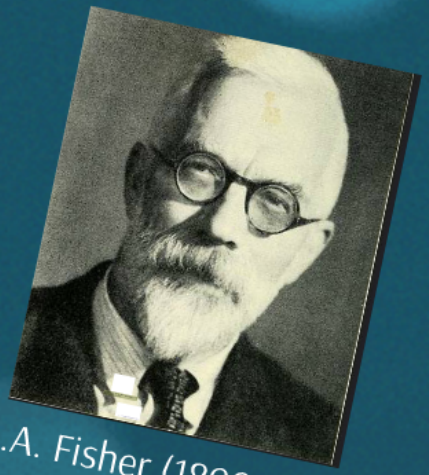
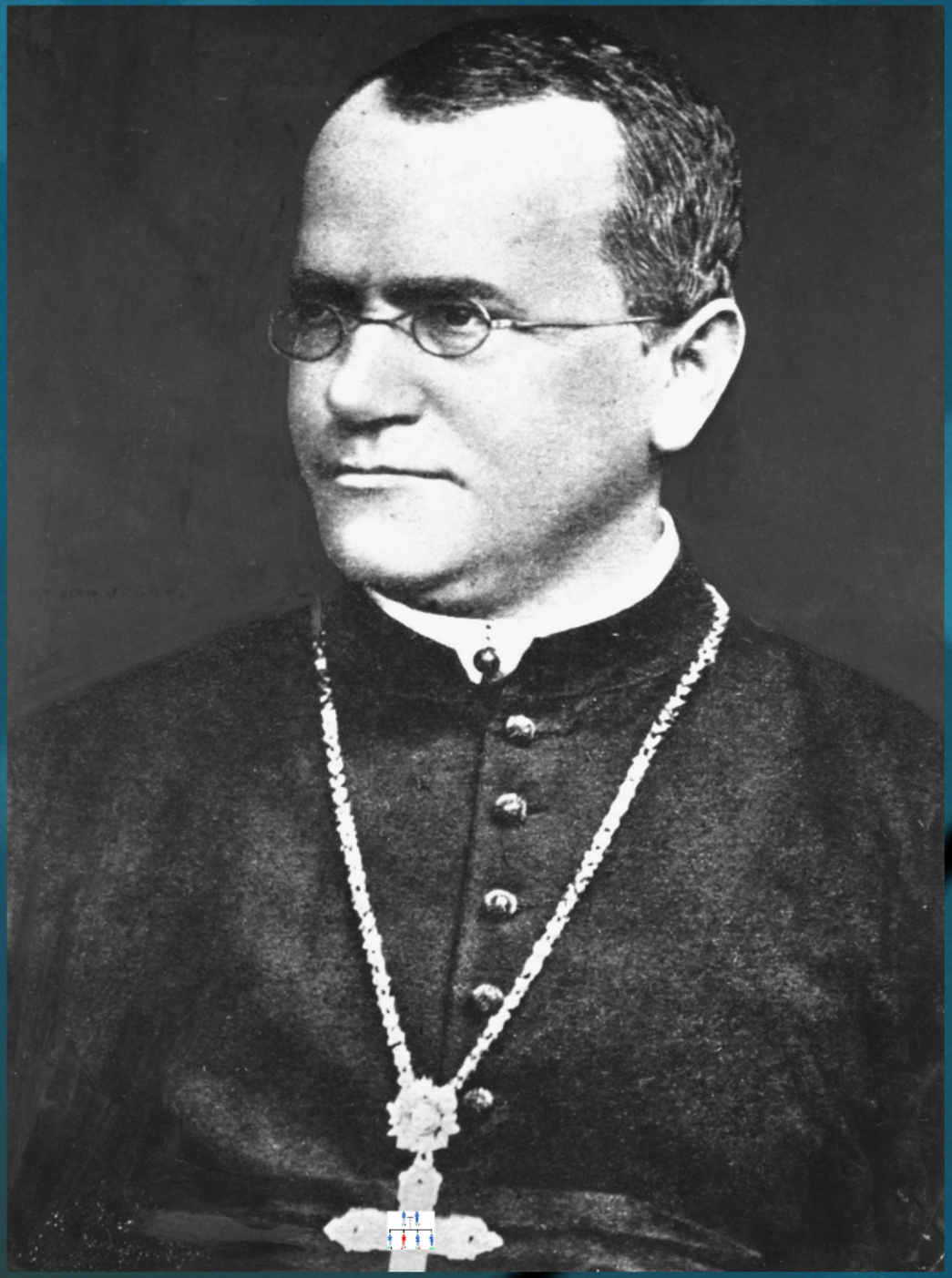


Génétique des populations

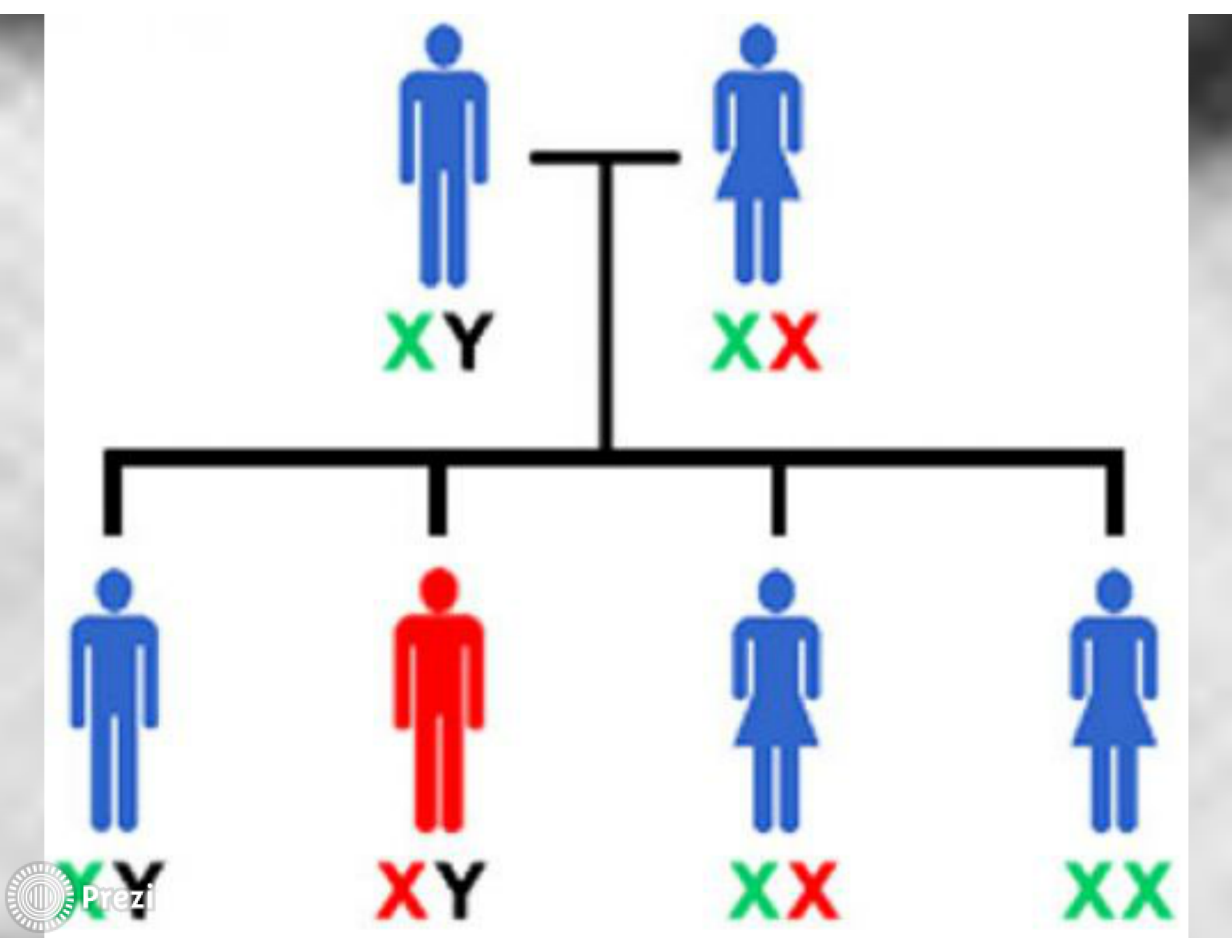
G. Mendel (1822-1884)



R.A. Fisher (1890-1962)



G. Mendel (1822-1884)


XY
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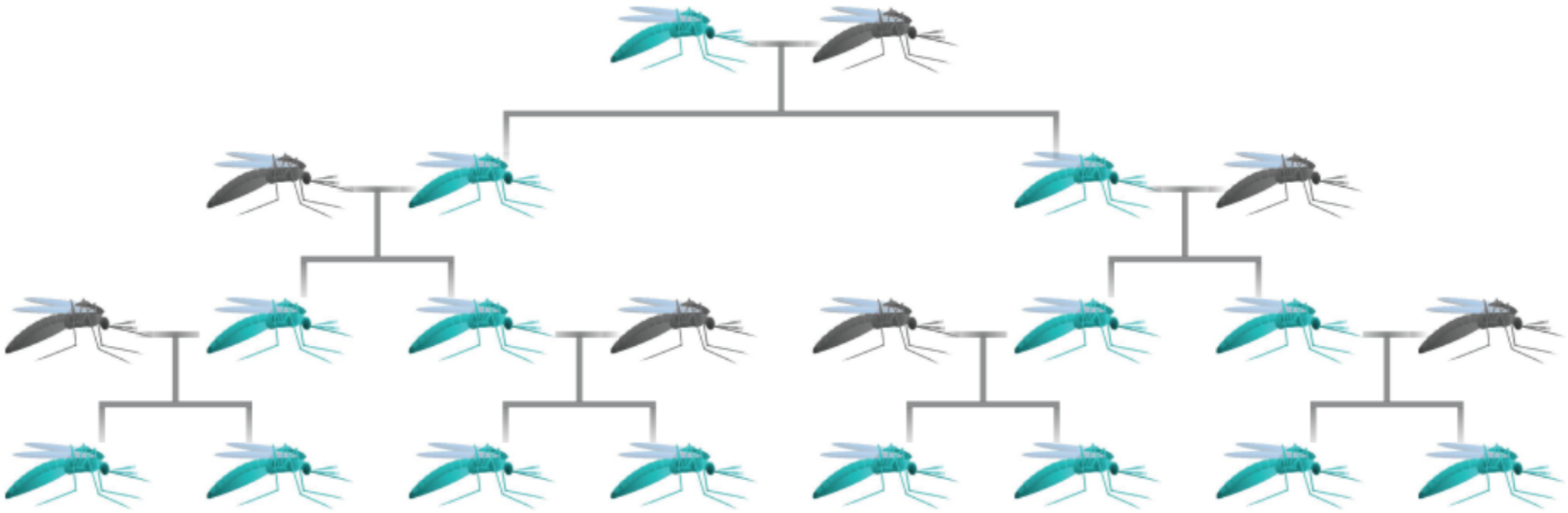
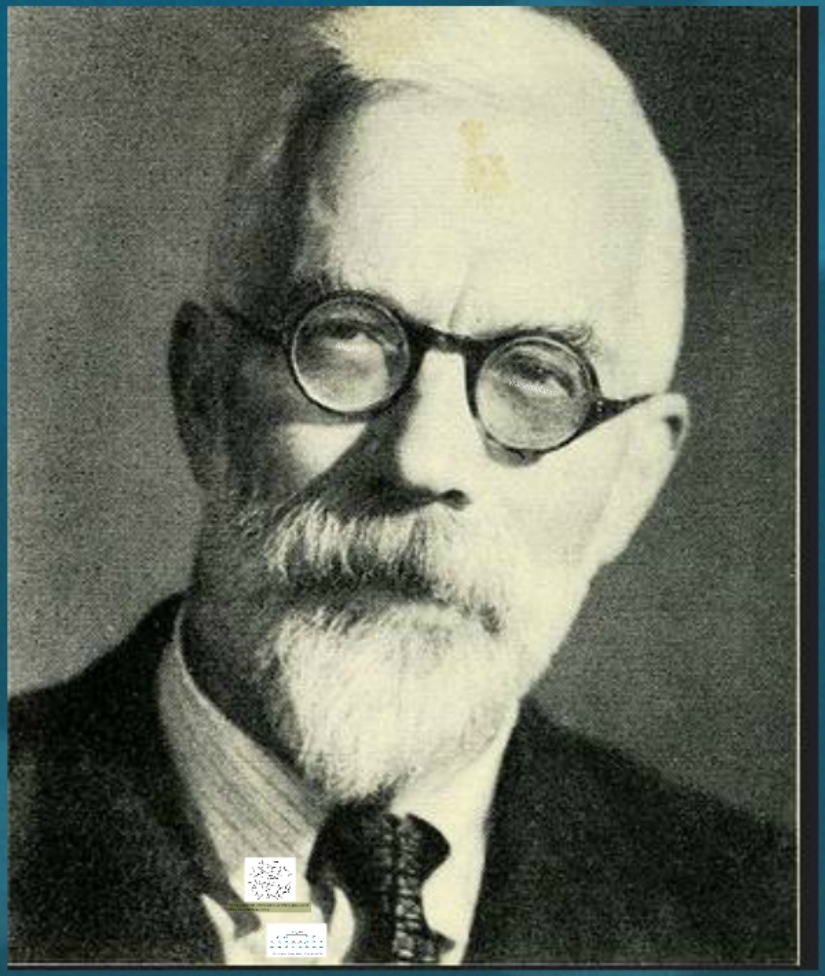
The Correlation Between Relatives ont the Supposition of Mendelian Inheritance (1915)



The Genetical Theory of Natural Selection (1930)



R.A. Fisher (1890-1962)

ANOVA

Vraisemblance

La maitrise du hasard

Statistique

Inférence

Variance

Analyse discriminante

Plan d'échantillonnage

Courbe de Gauss

Binomiale

Régression

Erreur-standard

Analyse en composantes principales

Analyse de la variance

Séries chronologiques

Moindres carrés

Moyenne

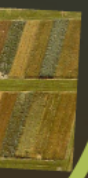
Maximum de vraisemblance

Arbre de décision

Estimation

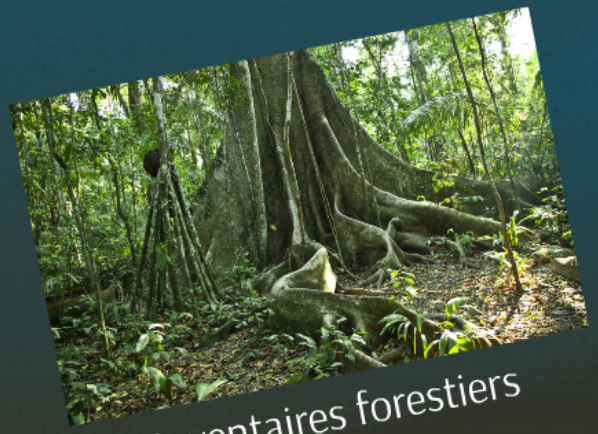
Test d'hypothèse

Experimental design



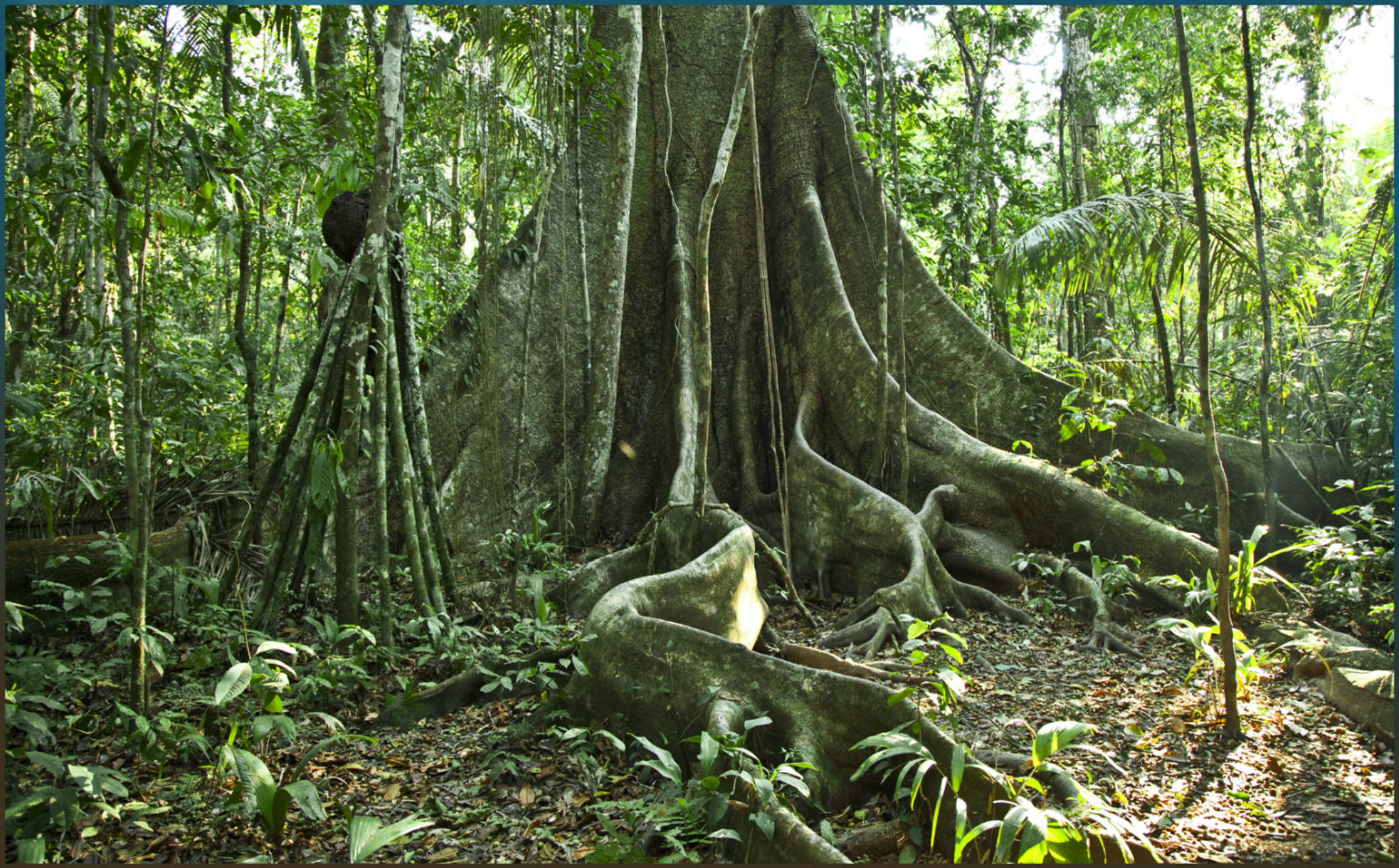
Agronomie

Ecologie



Inventaires forestiers

Recensements de faune



Inventaires forestiers

Recensements de faune

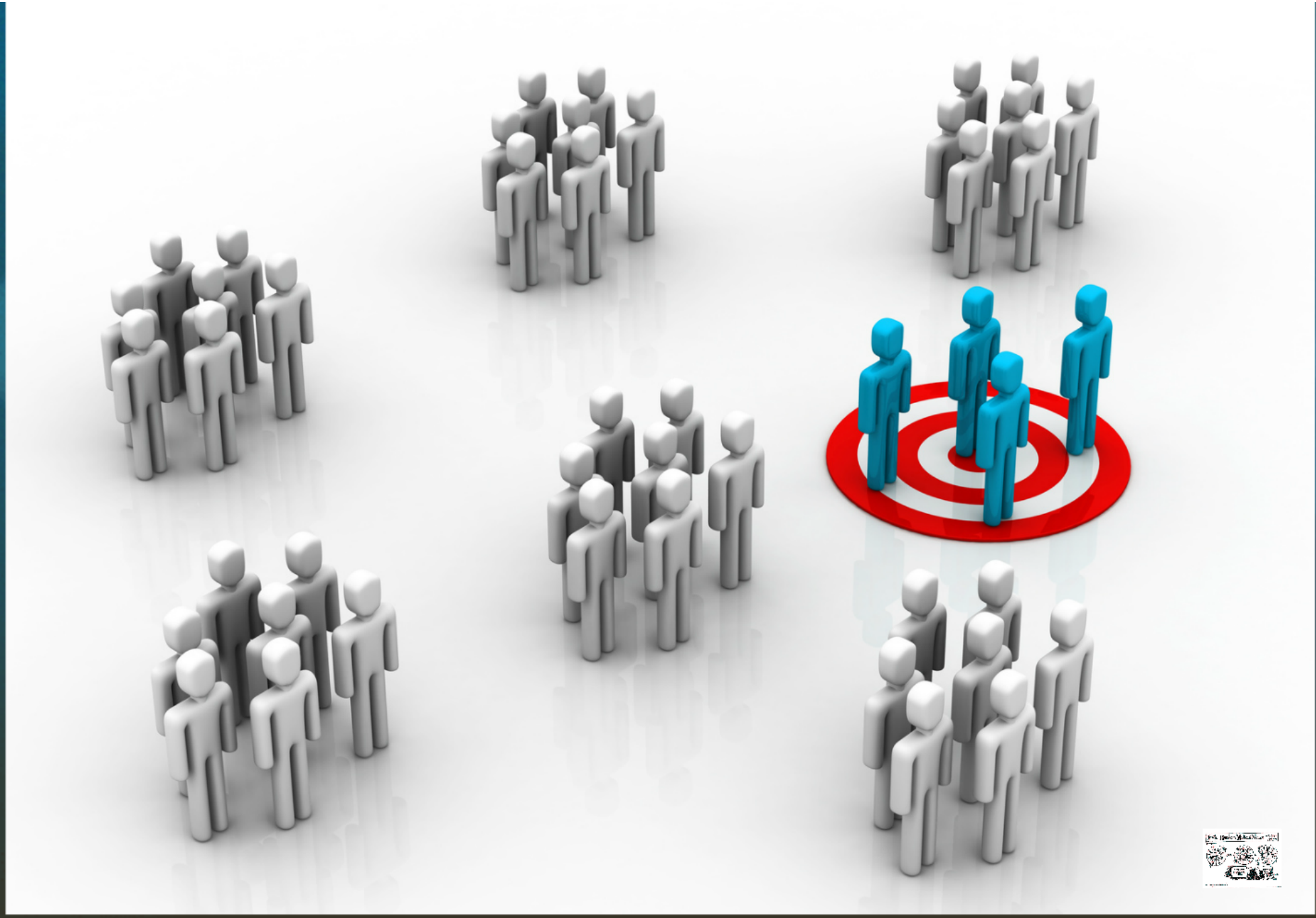
Santé & médecine

Etudes cliniques

Neurologie

Epidémiologie

Etudes cliniques



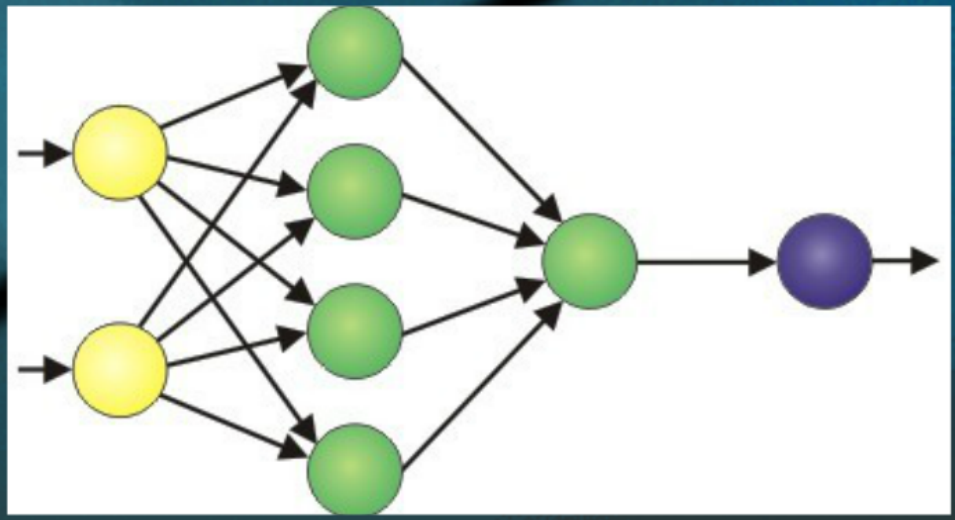
Epidémiologie

One view of the value of epidemiology

Neurologie

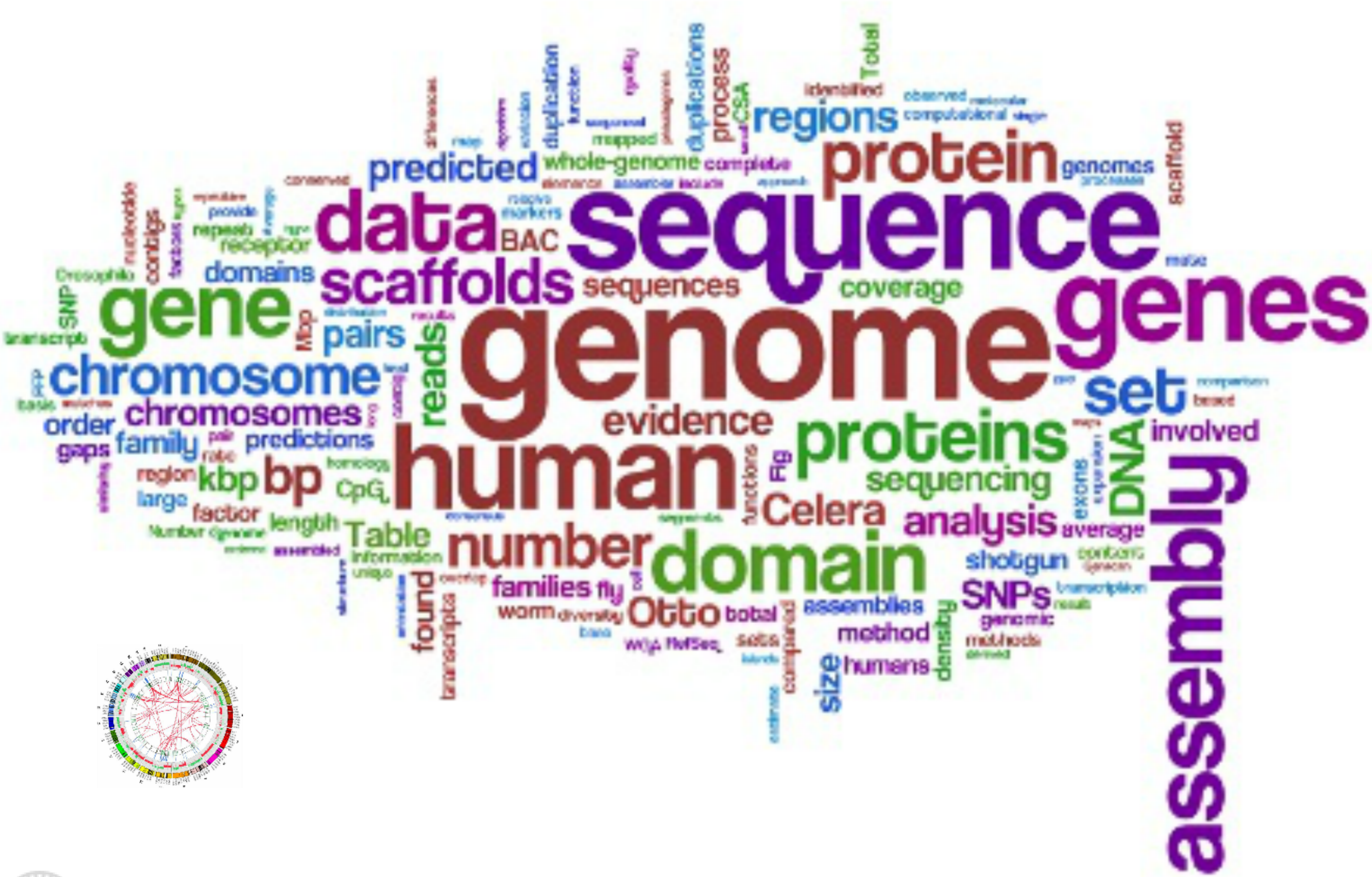
Prezi

Apprentissage par



Réseaux neuronaux

Nouveaux défis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genes
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data
protein
proteins
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assembly
number
scaffolds
chromosome
chromosomes
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bp
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Celera
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predicted
regions
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sequences
coverage
pairs
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kbp
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SNPs
shotgun
families
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humans
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size
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duplications
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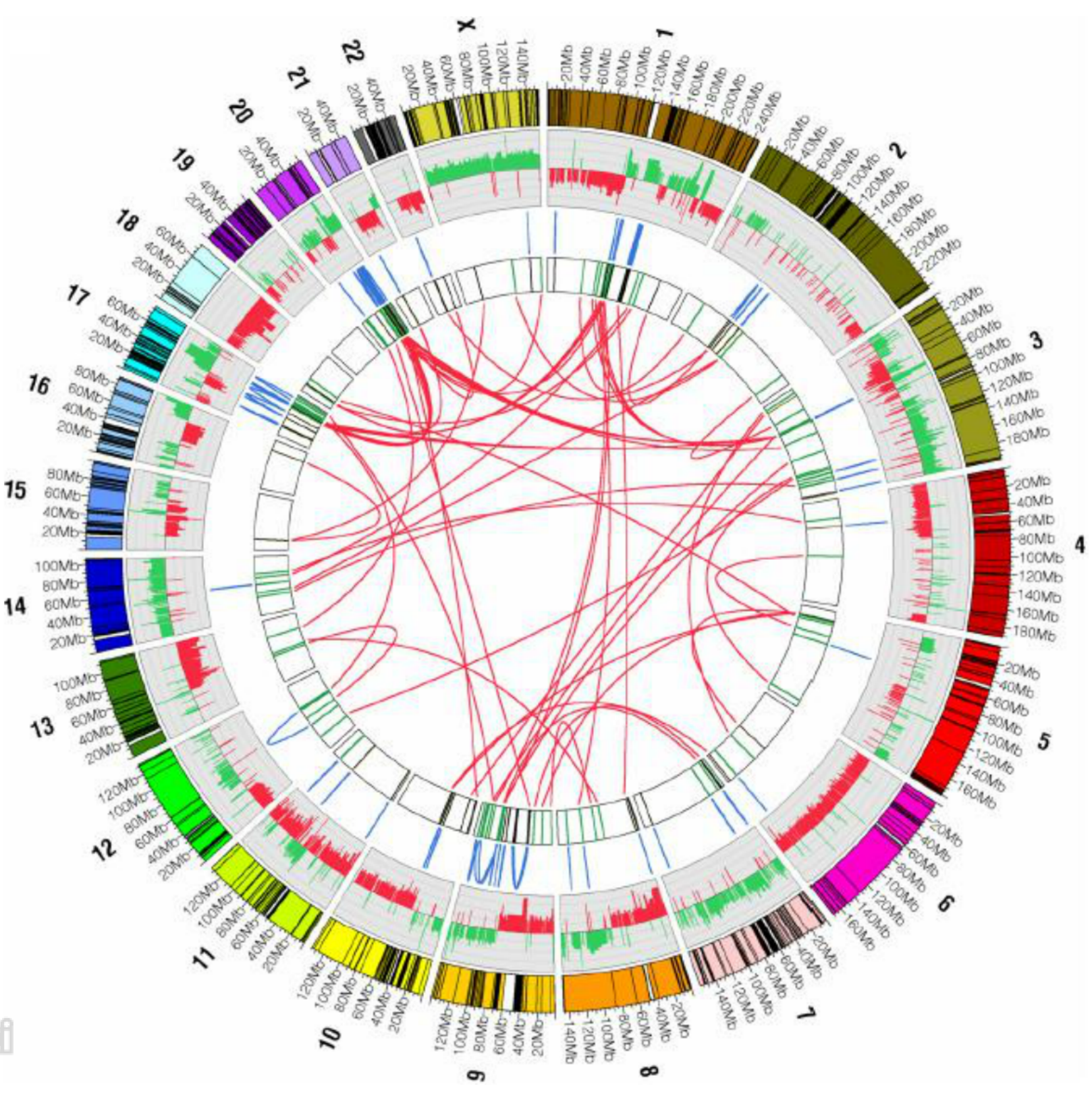
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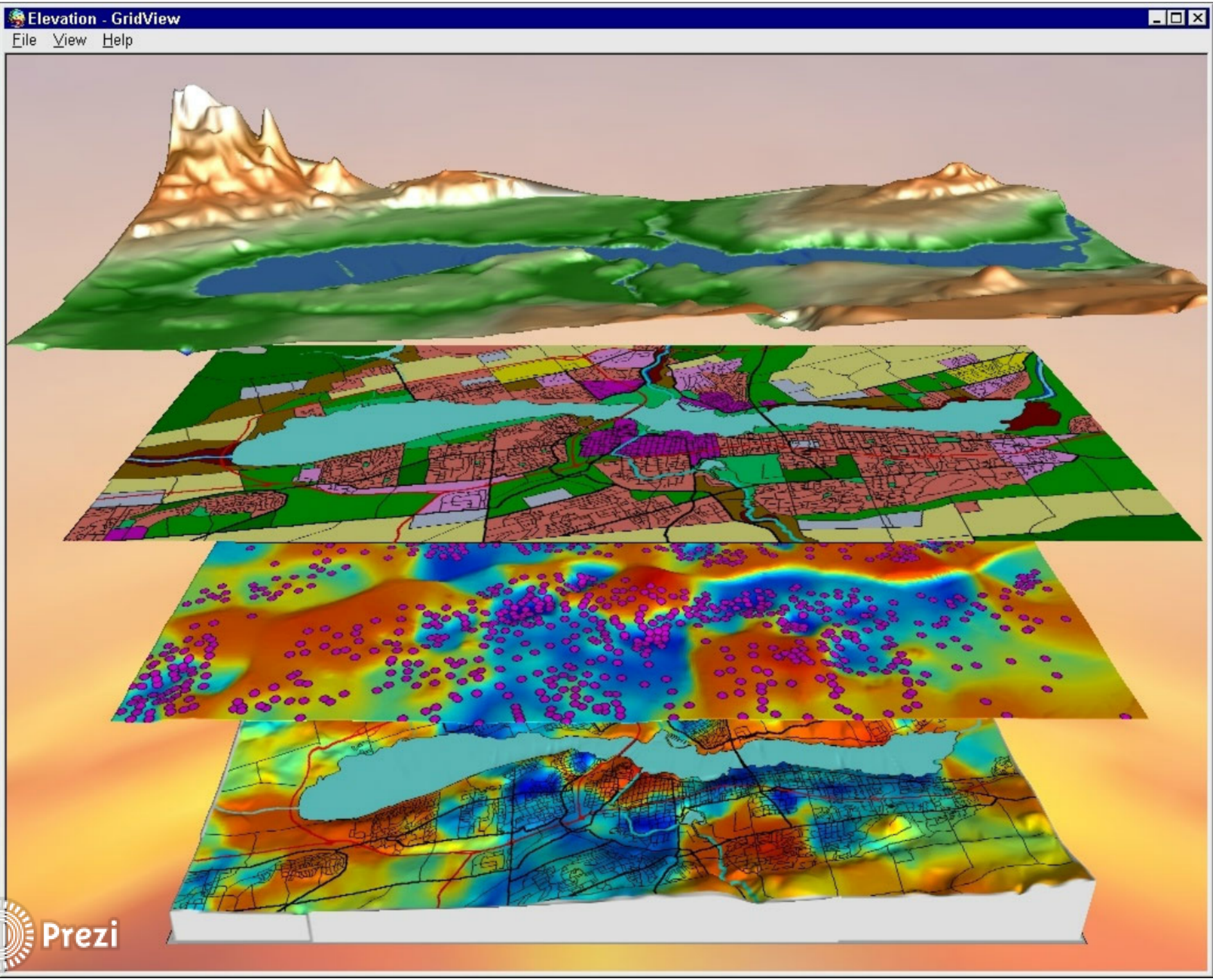
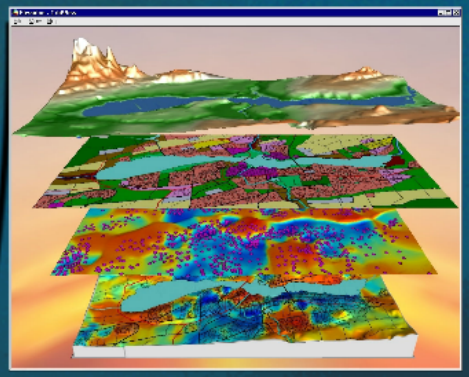

Elevation - GridView
File View Help
Prezi

Toujours plus de données

Toujours plus complexes

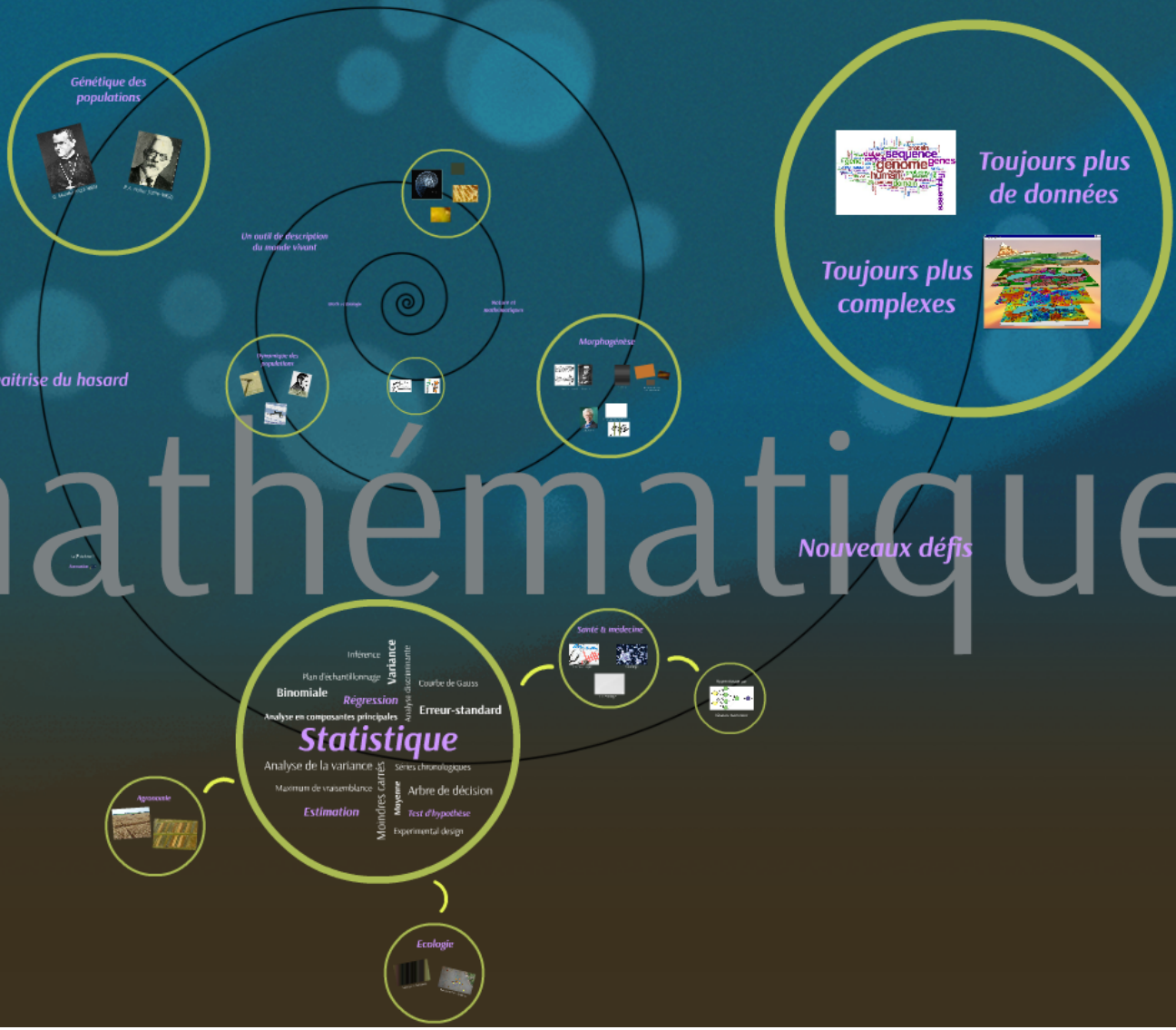


La  du futur ?

Formation 

De l'application des mathématiques en biologie : acquis et perspectives

Pr Yves Brostaux (Dr Ir)
Axe Modélisation et Développement
Gembloux Agro-Bio Tech
Université de Liège



Prezi

Merci de votre attention