


Review

Investigating Biotic Interactions in Deep Time

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in 4 4 4 4 4 i 4 4 [

... 100 ... [73]. ... [74-76].

... **funcional de** ... [77-79]. ... PT ...

316..7(тс)-7 316..7(тс)-7 316..7(тс)-7 316..7(т7.54 27.9(1(БТ8-10.5(-264.47()-)16.7() 729(i2.5(i)2(4.0i)18.

Քիմիայի ֆիզիկայի ինստիտուտի կողմից կատարված հետազոտությունների արդյունքները (Ֆիզ. 2). Երևանի համալսարանի ֆիզիկական ֆակուլտետի ԿՔ-ը հրատարակել է իր համալսարանի հրատարակչության կողմից հրատարակված «Ֆիզիկա» գրքի 19-րդ համարում (1990 թ.)

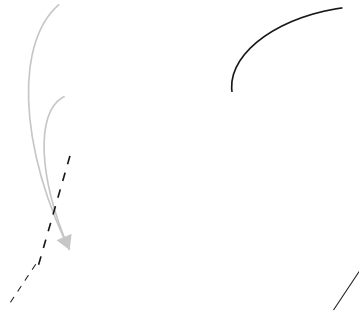
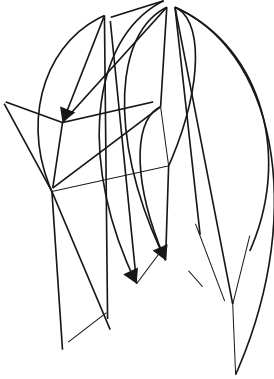
T₁ 1.A R U Q if M M f B i I U i P i T₁ D₁
(S₁ A N , W i O A E f P A i M)

Table 1 (continued)

M					

H... I... B... I...

M... (Homo sapiens) f A... 50 [83].
H... i... i... i... ff...
i... [84,85]. N... i...
ff... [83,86,87]. l i



The diagram illustrates the relationship between the geometry of a leaf and the underlying mathematical structure. The left part shows a complex network of lines, while the right part shows a simplified representation of the same structure. The text below discusses the mathematical properties of these structures, including the use of the Riemann-Roch theorem and the concept of a divisor.

The diagram shows a complex structure on the left, which is a representation of a leaf or a petal. The structure is composed of several overlapping, curved lines that form a series of triangles and quadrilaterals. The right part of the diagram shows a simplified version of the same structure, consisting of a few curved lines and a dashed line with an arrowhead.

The text below discusses the mathematical properties of these structures. It mentions the Riemann-Roch theorem, which is a fundamental result in algebraic geometry. The text also discusses the concept of a divisor, which is a central object in the study of curves and surfaces.

The diagram and the text together provide a visual and mathematical representation of the relationship between the geometry of a leaf and the underlying mathematical structure. The left part of the diagram shows the complex geometry, while the right part shows the simplified mathematical structure. The text below explains the mathematical properties of these structures.



Biotic
nre

... i i ... f ... i ... - ... i ...
i ... nre ... f ...

A ... - i ... , nre ... i i f ... , ... i
... f i ... f i ... n ... f ... n i ... [92,93].
H ... n ... i ... P i ... (16-14 ...) H ... (11.7 ...)
... i i ... i ... nre ... , ... i ...
... , ... f ... , ... i i ... f ... n ...
... [92,94]. I ... i ... f ... nre ... , ... ,
... n ... i f i ... f ... i ...
... i i [95]. ... i i ... , i ... , nre ... i
... i f ... n ... i ...

A ... f ... i i f i ... i ... i ... f ... i
(T ... 1) i ... nre ... , ... i ...
i ... nre ... i f ... nre ... , ... i ...
(F i ... 3). B ... P i ... - ... (11.7 ...), nre ... f ...
... f ... i ... (... i ...) ...
i ... 300 ... [86]. T i ... i ...
(...) [86,96]. A ... f ... i f f ...
... i ... (T ... 1) ... f ... i ...
... i f ... i ... [34], ...
... i ... [96]. W ... f ... nre ...
... f ... i f ... i ... - ... , ... n
i i ... nre ... [34,96]. S i n i ... , ... i ...
... i ... nre ... i ... (Canis familiaris) i ... f
... nre ... i ... [15], ... i ...
... i f ... i ...

Reference

1. Pilon, E.G. (2016) Olfaction in the mouse: a review of the olfactory system. *PLoS Biol.* 14, 2000891
- 2.

51. Kellner, B. et al. (2019) The evolution of the brain's response to the environment. *Proc. R. Soc. B* 286, 20191634
52. Fine, R. et al. (2019) Disruption of the brain's response to the environment. *Proc. Natl. Acad. Sci. U.S.A.* 116, 79–83
53. Fine, R. et al.

101. Si *et al.* (2020) A 450-yr-old... *Ecol. Lett.* 23, 439-446
102. E *et al.* (2016) E... *Ecol. Lett.* 19, 899-906
103. L *et al.* (2017) E... *Syst. Biol.* 66, 128-144
104. A *et al.* (2018) C... *Nat. Commun.* 9, 1-13
105. G *et al.*