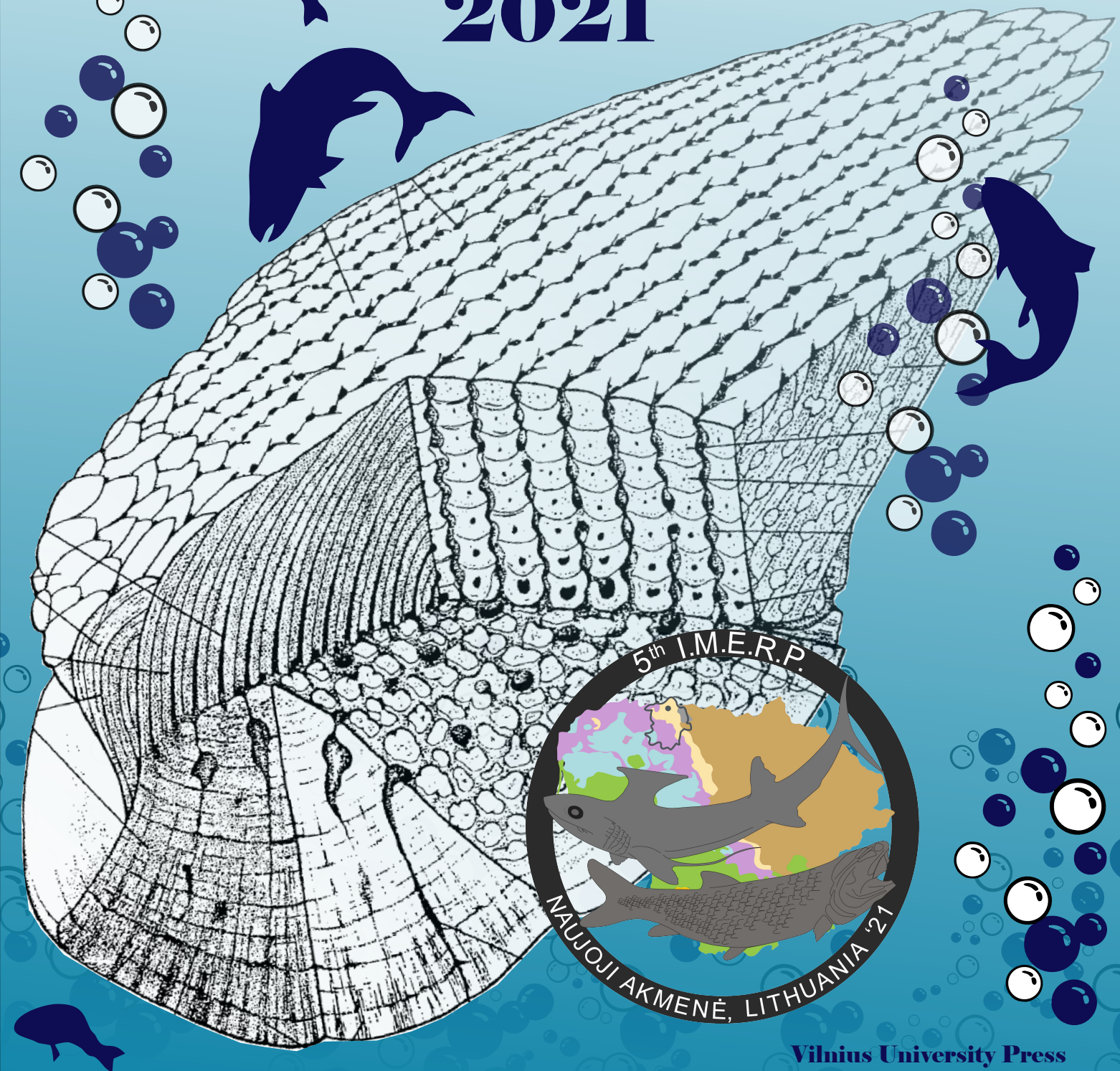
5th International Meeting of Early-stage Researchers in Palaeontology Lithuania 2021



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BOOK OF ABSTRACTS

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NEW CARNIVORE MATERIAL FROM THE EARLY PLEISTOCENE OF LA PUEBLA DE VALVERDE (SPAIN): A MULTIVARIATE TAXONOMICAL APPROACH BASED ON THE DENTITION UPDATES THE SYSTEMATICS OF THE GENUS *LYNX*

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Despite lynxes were spread throughout Europe, Asia and North America during the Pliocene and Pleistocene, their origin is still far from being understood and some controversy exists about their evolutionary relationships. Here we report and describe a new complete left hemimandible of a medium-sized felid from the Early Pleistocene (MN17, middle Villafranchian, ca. 2.05 Ma) site of La Puebla de Valverde (Teruel, Spain), which is characterised by a slender mandibular corpus and ascendent ramus, absence of the p3-p4 diastema, small canines and elongated p4 and m1. Such a unique finding entails not only significant systematic implications, but also ecological and palaeobiological ones. Thus, our findings update the systematic of the genus *Lynx* and emphasise its (morphological) variability; extends unambiguously its geographical distribution in the Iberian Peninsula; reinforce the view that the Plio-Pleistocene Issoire lynx should be attributed to the genus *Lynx* (instead to *Caracal*); and point to dietary convergence to small/medium preys that fits well with the environmental scenario of the epoch and the evolutionary changes that the lynxes underwent in the Early Pleistocene. Finally, we show how the multivariate analysis play a pivotal role in the correct discrimination at the species level in homogeneous groups such as the *Lynx* genus, with regards to lower dentition.