New and old problems in Applied Mathematics

Miguel Ángel Herrero*

Ever since its foundation in 1984, the Department of Applied Mathematics of Universidad Complutense has been a meeting point for applied -minded mathematicians with an interest in real -world problems, and eager to become part of the international scientific community, thus breking a tradition of isolation. This trend was fully developed during Ildefonso Diaz's tenure as Head of Department, from 1984 to 1994, and this lecturer particularly benefited from it.

As a short illustration of ongoing research, I will briefly describe recent work on issues as formation of early vasculature, optimization problems in radiotherapy and the search for earliest fossils on Earth, as well as the role of Mathematics in addressing such issues will be discussed.

^{*}Departamento de Matemática Aplicada. Universidad Complutense de Madrid, Parque de las Ciencias 3, 28040-Madrid, Spain. e-mail: herrero@mat.ucm.es