



Allegato 1: Macroaree e aree scientifiche ERC

Macroarea PE: Physical Sciences and Engineering PE1 Mathematics: All areas of mathematics, pure and applied, plus mathematical foundations of computer science, mathematical physics and statistics PE2 Fundamental Constituents of Matter: Particle, nuclear, plasma, atomic, molecular, gas, and optical physics Structure, electronic properties, fluids, nanosciences, biophysics Chemical Sciences: Analytical physical chemistry, chemical physics PE5 Synthetic Chemistry and Materials: Materials synthesis, systucture-properties relations, organogenesis, and spinory and biology, and biology synthesis, modification and interaction, biochemistry. Molecular synthesis, modification and interaction, biochemistry, biophysics, structural biology, metabolism, signal transduction Sh2 Institutions, Values, Economics, finance and Space: Political science, law, sustainability science, law, sustainability science, geography, regional studies and planning sustainability science, solicology, social psychology, demography, education, communication Sh3 The Social World, biology, social psychology, demography, education, communication Sh4 The Human Mind and Its Complexity: Cognitive science, psychology, science, psychology, organogenesis, developmental linguistics, philosophy of
PE1 Mathematics: All areas of mathematics, pure and applied, plus mathematical foundations of computer science, mathematical physics and statistics PE2 Fundamental Constituents of Matter: Particle, nuclear, plasma, atomic, molecular, gas, and optical physics PE3 Condensed Matter Physics: Structure, electronic properties, fluids, nanosciences, biophysics Structure, electronic properties, chemistry, chemical physics Chemical Sciences: Analytical physics PE5 Synthetic Chemistry and Materials: Materials: Materials synthesis, structure-properties relations, organogenesis, developmental
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plus mathematical foundations of computer science, mathematical physics and statistics PE2 Fundamental Constituents of Molecular synthesis, modification and interaction, biochemistry, biophysics, structural biology, metabolism, signal transduction LS2 Genetics, Genomics, atomic, molecular, gas, and optical physics PE3 Condensed Matter Physics: Structure, electronic properties, fluids, nanosciences, biophysics PE4 Physical and Analytical Chemistry, chemical physics Chemical Sciences: Analytical physics PE5 Synthetic Chemistry and Materials: Materials: Materials synthesis, structure-properties relations, Molecular synthesis, modification and interaction, biochemistry, biochemistry, biochemistry, biochemistry, biochemistry, organogenesis, metabolomy, biochemistry, biology, signal transduction Molecular synthesis, modification and interaction, biochemistry, biochemistry, biochemistry, biology, signal transduction SH2 Institutions, Values, Environment and Space: Political science, law, sustainability science, geography, regional studies and planning SH3 The Social World, Diversity, Population: Sociology, social psychology, demography, education, communication LS3 Cellular and Developmental Biology, cell biology, cell biology, signal transduction, organogenesis, developmental linguistics, philosophy of
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Materials: Materials synthesis, structure-properties relations, organogenesis, developmental linguistics, philosophy of
structure-properties relations, organogenesis, developmental linguistics, philosophy of
functional and advanced materials, genetics, pattern formation in mind
molecular architecture, organic plants and animals, stem cell SH5 Cultures and Cultural
chemistry biology Production: Literature,
PE6 Computer Science and LS4 Physiology, Pathophysiology philology, cultural studies,
Informatics: Informatics and and Endocrinology: Organ anthropology, study of the
information systems, computer physiology, pathophysiology, arts, philosophy
science, scientific computing, endocrinology, metabolism, ageing, SH6 The Study of the Human
intelligent systems tumorigenesis, cardiovascular Past : Archaeology and history
PE7 Systems and Communication disease, metabolic syndrome
Engineering: Electrical, electronic,
communication, optical and LS5 Neurosciences and Neural
systems engineering Disorders: Neurobiology,
PE8 Products and Processes neuroanatomy, neurophysiology,
Engineering: Product design, neurochemistry,
process design and control, neuropharmacology, neuroimaging,
construction methods, civil systems neuroscience, neurological
engineering, energy processes, and psychiatric disorders
material engineering LS6 Immunity and Infection: The
PE9 Universe Sciences: Astro- immune system and related
physics/chemistry/biology; solar disorders, infectious agents and
system; stellar, galactic and diseases, prevention and treatment
extragalactic astronomy, planetary of infection





systems, cosmology,	space	science
instrumentation		

PE10 Earth System Physical geography, geology, geophysics, atmospheric sciences, oceanography, climatology, ecology, global cryology, environmental change, biogeochemical cycles, natural resources management

Science, Medical Technology and Public Science: Health: Aetiology, diagnosis and treatment of disease, public health, epidemiology, clinical medicine, regenerative medicine, medical ethics

LS8 Evolutionary, Population and Environmental Biology: Evolution, ecology, animal behaviour, population biology, biodiversity, biogeography, marine biology, microbial ecology

LS9 Applied Life Sciences and Non-Medical Biotechnology: Applied plant and animal sciences; food sciences; forestry; industrial, environmental and non-medical biotechnologies, nanobiotechnology, bioengineering; synthetic and chemical biology;

biomimetics; bioremediation