Panels 2024 calls

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

PE3 Condensed Matter Physics

Structure, electronic properties, fluids, nanosciences, biological physics

PE4 Physical and Analytical Chemical Sciences

Analytical chemistry, chemical theory, physical chemistry/chemical physics

PE5 Synthetic Chemistry and Materials

New materials and new synthetic approaches, structure -properties relations, solid state chemistry, molecular architecture, organic chemistry

PE6 Computer Science and Informatics

Informatics and information systems, computer science, scientific computing, intelligent systems

PE7 Systems and Communication Engineering

Electrical, electronic, communication, optical and systems engineering

PE8 Products and Processes Engineering

Product and process design, chemical, civil, environmental, mechanical, vehicle engineering, energy processes and relevant computational methods

PE9 Universe Sciences

Astro -physics/ -chemistry/ -biology; solar system; planetary systems; stellar, galactic and extragalactic astronomy; cosmology; space sciences; astronomical instrumentation and data

PE10 Earth System Science

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

PE11 Materials Engineering

Advanced materials development: performance enhancement, modelling, large -scale preparation, modification, tailoring, optimisation, novel and combined use of materials, etc.

Life Sciences

LS1 Molecules of Life: Biological Mechanisms, Structures and Functions

For all organisms:

Molecular biology, biochemistry, structural biology, molecular biophysics, synthetic and chemical biology, drug design, innovative methods and modelling

LS2 Integrative Biology: from Genes and Genomes to Systems

For all organisms:

Genetics, epigenetics, genomics and other ‘omics studies, bioinformatics, systems biology, genetic diseases, gene editing, innovative methods and modelling, ‘omics for personalised medicine

LS3 Cell Biology, Development, Stem Cells and Regeneration

For all organisms:

Structure and function of the cell, cell -cell communication, embryogenesis, tissue differentiation, organogenesis, growth, development, evolution of development, organoids, stem cells, regeneration, therapeutic approaches

LS4 Physiology in Health, Disease and Ageing

Organ and tissue physiology, comparative physiology, physiology of ageing, pathophysiology, inter-organ and tissue communication, endocrinology, nutrition, metabolism, interaction with the microbiome, non -communicable diseases including cancer (and except disorders of the nervous system and immunity -related diseases)

LS5 Neuroscience and Disorders of the Nervous System

Nervous system development, homeostasis and ageing, nervous system function and dysfunction, systems neuroscience and modelling, biological basis of cognitive processes and of behaviour, neurological and mental disorders

– In humans and all other organisms

LS6 Immunity, Infection and Immunotherapy

The immune system, related disorders and their mechanisms, biology of infectious agents and infection, biological basis of prevention and treatment of infectious diseases, innovative immunological tools and approaches, including therapies

LS7 Prevention, Diagnosis and Treatment of Human Diseases

Medical technologies and tools for prevention, diagnosis and treatment of human diseases,

therapeutic approaches and interventions, pharmacology, preventative medicine, epidemiology and public health, digital medicine

LS8 Environmental Biology, Ecology and Evolution

For all organisms:

Ecology, biodiversity, environmental change, evolutionary biology, behavioural ecology, microbial ecology, marine biology, ecophysiology, theoretical developments and modelling

LS9 Biotechnology and Biosystems Engineering

Biotechnology using all organisms, biotechnology for environment and food applications, applied plant and animal sciences, bioengineering and synthetic biology, biomass and biofuels, biohazards

Social Sciences and Humanities

SH1 Individuals, Markets and Organisations

Economics, finance, management

SH2 Institutions, Governance and Legal Systems

Political science, international relations, law

SH3 The Social World and Its Interactions

Sociology, social psychology, education sciences, communication studies

SH4 The Human Mind and Its Complexity

Cognitive science, psychology, linguistics

SH5 Texts and Concepts

Literary studies, literature, philosophy

SH6 The Study of the Human Past

Archaeology and history

SH7 Human Mobility, Environment, and Space

Human geography, demography, health, sustainability science, territorial planning, spatial analysis

SH8 Studies of Cultures and Arts

Social anthropology, studies of cultures, studies of arts