

Annex 1

Primary panel structure and description

Physical Sciences & 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, biophysics.

PE4 Physical and Analytical Chemical Sciences

Analytical chemistry, chemical theory, physical chemistry/chemical physics.

PE5 Synthetic Chemistry and Materials

Materials synthesis, structure-properties relations, functional and advanced materials, 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 design, process design and control, construction methods, civil engineering, energy processes, material engineering.

PE9 Universe Sciences

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

PE10 Earth System Science

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

Life Sciences

LS1 Molecular and Structural Biology and Biochemistry

Molecular synthesis, modification and interaction, biochemistry, biophysics, structural biology, metabolism, signal transduction.

LS2 Genetics, Genomics, Bioinformatics and Systems Biology

Molecular and population genetics, genomics, transcriptomics, proteomics, metabolomics, bioinformatics, computational biology, biostatistics, biological modelling and simulation, systems biology, genetic epidemiology.

LS3 Cellular and Developmental Biology

Cell biology, cell physiology, signal transduction, organogenesis, developmental genetics, pattern formation in plants and animals, stem cell biology.

LS4 Physiology, Pathophysiology and Endocrinology

Organ physiology, pathophysiology, endocrinology, metabolism, ageing, tumorigenesis, cardiovascular disease, metabolic syndrome.

LS5 Neurosciences and Neural Disorders

Neurobiology, neuroanatomy, neurophysiology, neurochemistry, neuropharmacology, neuroimaging, systems neuroscience, neurological and psychiatric disorders.

LS6 Immunity and Infection

The immune system and related disorders, infectious agents and diseases, prevention and treatment of infection.

LS7 Diagnostic Tools, Therapies and Public Health

Aetiology, diagnosis and treatment of disease, public health, epidemiology, pharmacology, clinical medicine, regenerative medicine, medical ethics.

LS8 Evolutionary, Population and Environmental Biology

Evolution, ecology, animal behaviour, population biology, biodiversity, biogeography, marine biology, eco-toxicology, microbial ecology.

LS9 Applied Life Sciences and Non-Medical Biotechnology

Applied plant and animal sciences, food sciences, forestry, industrial, environmental and non-medical biotechnologies, bioengineering, synthetic and chemical biology, biomimetics, bioremediation.

Social Sciences & Humanities

SH1 Individuals, Markets and Organisations

Economics, finance and management.

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.

SH4 The Human Mind and Its Complexity

Cognitive science, psychology, linguistics, philosophy of mind.

SH5 Cultures and Cultural Production

Literature, philology, cultural studies, anthropology, study of the arts, philosophy.

SH6 The Study of the Human Past

Archaeology and history.