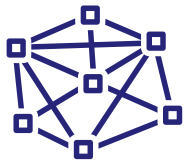


**PROFESSOR MARKUS LUCZAK-ROESCH  
CHAIR IN COMPLEXITY SCIENCE, WSBG**

# **NAVIGATING COMPLEXITY: A NEW PARADIGM FOR CHALLENGES OF THE 21ST CENTURY AND BEYOND**

## **LIMITS OF SCIENCE AS WE KNOW IT**

THE SCIENCE OF THE 20TH CENTURY CANNOT SOLVE THE PROBLEMS OF THE 21ST.



## **COMPONENTS OF COMPLEXITY**

COMPLEX SYSTEMS, SUCH AS OUR CLIMATE, EVOLVE AUTONOMOUSLY AND FEATURE NON-TRIVIAL INTERACTIONS, LEADING TO DYNAMIC AND EMERGENT BEHAVIOURS.

## **ADAPTING METHODS**

COMPLEXITY SCIENCE IS A GROWING FIELD THAT CROSSES TRADITIONAL ACADEMIC BOUNDARIES. NOT ONLY IS THE WAY WE STUDY COMPLEXITY CONSTANTLY EVOLVING, BUT HOW IT CONNECTS WITH AND MOVES ACROSS DIFFERENT DISCIPLINES IS ALSO CHANGING.



## **NEW WAYS OF THINKING**

TO TACKLE THE BIGGEST AND MOST COMPLEX CHALLENGES OF OUR TIME, WE NEED NEW PARADIGMS.

## **EXAMPLES OF COMPLEX SYSTEMS WE STUDY**

WE DO FUNDAMENTAL AND APPLIED RESEARCH IN AREAS SUCH AS CULTURAL EVOLUTION, HUMAN BEHAVIOUR, CLIMATE, MEDIA AND THE INFOSPHERE.

## **TE MAHENO**

WE HAVE BEEN GIFTED THE NAME "TE MAHENO" FOR THE CHAIR IN COMPLEXITY SCIENCE. IN MĀORI, THIS MEANS 'TO UNTIE, RELEASE.'

**WHAT CHALLENGES WOULD YOU LIKE TO SOLVE? [CONTACT US](#) TO UNTANGLE THE COMPLEX ISSUES OF THE 21ST CENTURY. WE INVITE YOU TO COLLABORATE ON INNOVATIVE IDEAS, RESEARCH PROJECTS, AND GRANT PROPOSALS TO TACKLE THE WORLD'S BIGGEST CHALLENGES TOGETHER!**