## Open Letter to the Government of Chile

To His Excellency the President of Chile, Gabriel Boric

The Honourable Minister of Science, Technology, Knowledge and Innovation, Aldo Valle Acevedo

The Honourable Minister of Foreign Affairs, Alberto van Klaveren Stork

The Honourable Minister of the Economy, Development and Tourism and Honourable Minister of Energy, Álvaro García Hurtado

The Honourable Minister of the Environment, Maisa Rojas Corradi

14 November 2025

## Subject: Urgent appeal for the protection of the Paranal Observatory skies from the proposed INNA project

## Excellencies.

We, the undersigned, an international group of eminent researchers, including Nobel Laureates, write to you to express our deep concern about the INNA project at its proposed location and to urge the relocation of the planned industrial site. As currently conceived, the project represents an imminent threat to some of the most advanced astronomical facilities on Earth, operating under one of the world's last pristine dark skies.

Chile's Atacama Desert is the best place for astronomy on the planet, thanks to its dark skies, stable atmosphere and clement weather. Among the astronomical sites in the Atacama Desert, the Paranal Observatory, like all other professional observatories, benefits from the world's darkest and clearest skies of any astronomical observatory. This precious natural heritage is rightly a source of immense pride for Chile. It also represents an irreplaceable scientific resource that has allowed generations of astronomers to expand humanity's understanding of the universe. As such it transcends borders because the astronomical discoveries that it makes possible, including our own, benefit all of humanity.

The European Southern Observatory (ESO), with support from Chile, has built and now operates at Paranal some of the most advanced observatories in existence. These include the Very Large Telescope (VLT) and its unique interferometer (VLTI), the forthcoming Extremely Large Telescope (ELT) and, in collaboration with the Cherenkov Telescope Array Observatory (CTAO), CTAO South. These are not only milestones of science, but symbols of Chile's central role in the global exploration of the cosmos. The ability of these facilities to observe the most distant and faintest cosmic sources hinges largely on preserving the pristine dark skies and environment

of their location. As Chilean Astronomer Eduardo Unda-Sanzana eloquently stated in a <u>recent New York Times piece</u>: "Darkness is what makes me see clearer. It is the medium through which I can observe the universe's most delicate details. It's like how you need silence to hear the quietest noises."

The impact of the INNA project, planned to be located just a few kilometres from the VLT, the VLTI, the ELT, and CTAO South, would be devastating for the pristine skies of Paranal and for world astronomy. Earlier this year, an in-depth, data-driven technical analysis by ESO revealed that INNA would cause an increase of up to 35% in light pollution above Cerro Paranal. It also revealed other impacts of the project, from creating micro-vibrations that will negatively affect and possibly impede the operation of some of the most cutting-edge astronomical facilities, to increasing turbulence that blurs our view of the universe. The damage would extend beyond Chile's borders, affecting a worldwide scientific community that relies on observations made at Paranal to study everything from the formation of planets to the early universe.

While we recognise the need, both in Chile and globally, to develop green energy facilities, the proximity and extent of the infrastructure associated with the INNA project pose a grave threat, which cannot be mitigated given the closeness of the planned installation to the observatory. We are convinced that economic development and scientific progress can and must coexist *to the benefit of all people in Chile*, but not at the irreversible expense of one of Earth's unique and irreplaceable windows to the universe. We respectfully urge the Chilean government to call for the relocation of the INNA project and to protect the delicate Paranal environment with stricter laws and updated regulations.

Over the past 60 years, Chile has become the world's capital of astronomy, in no small part thanks to its pioneering laws to protect the dark skies, its public awareness efforts and its increasingly strong astronomical community. Today, this natural and cultural heritage is part of the Chilean identity and a source of inspiration for people all over the planet. We trust that, in the next 60 years, the country will continue to show the world how to safeguard such a fragile and valuable heritage. In doing so, Chile will keep shining as a global example of care and vision for the future.

Sincerely,

Reinhard Genzel

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Nobel Laureate in Physics (2020)

Max-Planck-Institute for Extraterrestrial Physics, Germany

Conny Aerts

Kavli prize in Astrophysics 2022, Crafoord prize in Astronomy 2024

KU Leuven, Belgium

Willy Benz

President of the IAU

University of Bern

Jonathan Bland-Hawthorn

ARC Laureate Professor, Director

Andreas Lunbert

Sydney Institute for Astronomy, University of Sydney

dant Haupron

**Andreas Burkert** 

Chair: Computational and Theoretical Astrophysics Ludwig-Maximilians University of Munich, Germany

President of the German Astronomical Society from 2011 to 2014

Catherine Cesarsky

C. Cesawky

Grand Croix of the Ordre National du Mérite 2025

ESO Director General from 1999 to 2007

CEA, Université Paris Saclay



Francoise Combes President of French Science Academy Paris Observatory, Collège de France

Richard Davies

RL Don.

Koger Davys

Principle Investigator of MICADO, first light ELT instrument Max-Planck-Institute for Extraterrestrial Physics, Germany

**Roger Davies** 

Professor emeritus Philip Wetton Chair of Astrophysics Department of Physics, University of Oxford

Frank Eisenhauer

Gruber Prize in Cosmology 2022

Max-Planck-Institute for Extraterrestrial Physics, Germany

Richard S Ellis, CBE FRS Professor of Astrophysics

University College London

Werdy Freedman

Wendy L. Freedman, FRS Gruber Prize in Cosmology 2009 University of Chicago

Paulo J. V. Garcia Professor

Universidade do Porto, Portugal

Shri Kulkarni Shri Kulkarni, FRS Shaw Prize 2024

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Roberto Maioliso

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Michel Mayor

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Physics Nobel Prize Laureate 2019

University of Cambridge, UK & ETH Zurich, Switzerland

Marcia J. Rieke

Gruber Prize in Cosmology 2024

Marcia J. Rieke

University of Arizona

Adam Riess

Nobel Prize Laureate 2011

Johns Hopkins University/STScI

province Pusio!

Mónica Rubio National Prize of Exact Sciences 2021 Universidad de Chile

Maria Teresa Ruiz

National Prize of Exact Sciences 1997

M. Teresa Ruir

Universidad de Chile

**Brian Schmidt** 

Nobel Prize laureate 2011 Australia National University

Charles ( Altra

Charles Steidel

Gruber Prize 2010

Linda Tacconi

Past President ESO Council

Linduf Jacenin

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Dett Tremaine

Scott Tremaine, FRS Institute for Advanced Study

Ewine van Dishoeck

IAU past-President, Kavli Prize in Astrophysics 2018

Leiden University, the Netherlands

And other eminent scientists and academics from around the world.