

PRESS KIT; ASTEROID DAY 2018

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OUICK LINKS

Website: AsteroidDay.org

Asteroid Day Events: http://www.AsteroidDay.org/events

Asteroid Day LIVE: AsteroidDay.org/live

Media Resources:: https://archive.asteroidday.org/newsroom/

Photos:: https://drive.google.com/open?id=0B26qPfEwFxyCdDZINXgyQ21EUUE **Video:** https://drive.google.com/drive/u/2/folders/0B26qPfEwFxyCdDZINXgyQ21EUUE

OFFICIAL BOILERPLATE DESCRIPTION

About Asteroid Day

Asteroid Day was co-founded in 2014, by Dr. Brian May, astrophysicist and lead guitarist for the rock band Queen, Danica Remy, B612 President, Apollo astronaut Rusty Schweickart, and filmmaker Grig Richters. Asteroid Day is held on 30 June each year to mark the date of Earth's largest asteroid impact in recorded history, the Siberia Tunguska event, which devastated over 2,000 km² of forest in 1908. In 2016, the United Nations declared Asteroid Day to be a global day of education to raise awareness about asteroids. Major sponsors of Asteroid Day include the Government of Luxembourg, B612 Foundation, Broadcasting Centre Europe (BCE), SES, and Tomorrow Street, a joint venture of Vodafone and Technoport. Asteroid Day is a program of the Asteroid Foundation, a Luxembourg-based nonprofit organization.

PRESS RELEASE: 14 June, 2018

NEWS ALERT: ASTEROID DAY 2018

From Luxembourg to Tanzania, Australia to China, and throughout Latin America, Europe and US - more than 2000 events planned for 28-30 June

ESA Director General to attend in Luxembourg



LUXEMBOURG, SILICON VALLEY -- <u>Asteroid Day, the official United Nations</u>' day of global awareness and education about asteroids, has announced worldwide events for the week of 25-30 June. Co-founded by astrophysicist and famed musician Dr. Brian May of the rock group Queen, Apollo 9 Astronaut Rusty Schweickart, Filmmaker Grig Richters, and B612 President Danica Remy, Asteroid Day began with two major events in 2015, and has grown to more than 2000 self-organized events worldwide.

Asteroid Day events will address science as well as government and private-sector initiatives to study asteroids, and particularly advanced efforts to develop greater detection, tracking and deflection techniques. Recent news, including the <u>asteroid impact in Botswana</u>, spotted only hours before impact this month, and the discovery last October of '<u>Oumuamua</u>, the first known interstellar object to pass through the Solar System, has renewed the focus on asteroid missions, such as <u>ESA's AIM/Hera</u>, and <u>NASA's NEOCam</u>. Additionally, results from a recent <u>Pew Research Center</u> independent survey showed the American public favors greater funding for planetary science.

Asteroid Day events are independently produced by space agencies, universities, science centers, planetariums, observatories, museums, schools, theaters, libraries, local governments and other civic organizations. Most events are aimed at citizens of all ages, and are free of charge; selected events can be viewed on the <u>Asteroid Day</u> website.

As in previous years, the European Space Agency (ESA) is <u>strongly supporting Asteroid Day</u> events in 2018. On Friday, 29 June, ESA senior managers, including Director General Jan Wörner, asteroid mission experts and ESA Astronaut Matthias Maurer, will participate in <u>Asteroid Day LIVE from Luxembourg</u>. On 30 June, the European Southern Observatory (ESO) and ESA are teaming up to produce a live webcast from the new <u>ESO Supernova Planetarium</u> & Visitor Centre in Garching, near Munich, Germany, packed with expert interviews, news and updates and some of the most recent asteroid science results, starting at 13:00 (1:00 PM) CEST. **Watch live** via http://www.esa.int/asteroidday.

ASTEROID DAY LIVE FROM LUXEMBOURG

29 June-1 July: 48-hour global broadcast

Ask your questions on Twitter, live during the broadcast at: #AsteroidDayLIVE

In 2017, the Asteroid Foundation debuted the first ever 24-hour live conversation about asteroids, broadcast from the Broadcasting Center Europe (BCE) studio at RTL City in Luxembourg. Asteroid Day *LIVE* returns in 2018, with 48 hours of content and commentary from experts around the world, hosted by Prof. Brian Cox, British physicist, author and BBC commentator. Prof. Cox will host astronauts, scientists, physicists, government officials from numerous countries, and special guests who serve as Asteroid Day ambassadors and asteroid experts.

Asteroid Day *LIVE* from Luxembourg will be distributed via a dedicated satellite, available on local channels subscribing to the <u>SES satellite network</u>, and via the <u>Asteroid Day website</u>. Media outlets can download the feed directly from the satellite via CDN (instructions <u>here</u>), or request information by contacting <u>PR@AsteroidDay.org</u>

2018 ASTEROID DAY EVENTS

Full listing can be accessed at: http://www.AsteroidDay.org/events

A sampling of local events and films (to date):

• Songwe Region, Tanzania. Lt. Chiku Chiku Gallawa will showcase the Mbozi meteorite, the sixth largest in the world; 40,000 participants expected to attend.



- National Space Centre, Leicester, UK has created Space Lates, with planetarium shows, VR experience and demos.
- Osservatorio Copernico, Rimini, Italy. The Park of the Observatory presents a major exhibition
 of meteorites from international collectors and an inflatable planetarium with telescopes to
 study the planets and stars.
- ESO Supernova Planetarium & Visitor Centre, Garching, Germany
- Perot Museum of Nature and Science, Dallas, TX
- Museum of Modern Art, New York will showcasing the sleek new Stellina Telescope
- National Air and Space Museum, Washington, DC will host US Astronaut Dr. Thomas Jones, NASA and other planetary experts, with special presentations and exhibits within NASM.
- AIAA Planetary Planetary Defense and Asteroid Exploration Conference, Los Angeles, CA
- Kennedy Space Center, Titusville, FL, will host US Astronaut Nicole Stott, and special public presentations and activities.
- Discovery Channel, a primary media partner of Asteroid Day, has produced specials about asteroids, and will showcase a VR presentation and other films on their worldwide channels.
- Scientists Rock, a seven-part series about Asteroids can be viewed on the Asteroid Day
 website. The series is narrated by famed astrophysicist Neil deGrasse Tyson, with interviews
 with UK Astronomer Royal Lord Martin Rees, Dr. Brian May, Peter Gabriel, and scores of
 astronauts and asteroid experts.

About Asteroid Day

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Join the Asteroid Day global conversation on Social Media:

- TWITTER: @asteroidday #AsteroidDay2018, #AsteroidDayLive;
- FACEBOOK: <u>www.facebook.com/AsteroidDay</u> #AsteroidDay, #AsteroidDayLive
- YOUTUBE: www.youtube.com/user/asteroidday

A Media Kit, including press releases, media alerts, quotes photos, video, and BROLL, is available in the <u>Asteroid Day Newsroom.</u> Media Contact: Diane Murphy, pr@asteroidday.org

Asteroid Day LIVE From Luxembourg (#AsteroidDayLive)

Asteroid Day LIVE returns in 2018 with an expanded 48-hour live broadcast about space the role of asteroids in our solar system. The show is produced from the Broadcasting Center Europe (BCE) studio at RTL City, Luxembourg, and serves as platform for a global conversation about asteroids. Hosted by British physicist, author and BBC commentator **Brian Cox**, participants include expert scientists, technologists and researchers in planetary science. Full list of participants is listed here.



ASTEROID DAY LIVE AT A GLANCE SCHEDULE

29 June to 1 July 2018

Full Schedule: https://asteroidday.org/broadcast-schedule/#
** All segments take Q&A from #AsteroidDayLive

Note that the times will be in your local time on the website. Times on this sheet are in CEST/Luxembourg

29 JUNE SCHEDULE

12:00 pm Asteroid Day Broadcast Begins

Overview: Prof. Brian Cox returns to host the first ever 48-hour global broadcast about asteroids & space. Bringing together asteroid experts, astronauts, policymakers and celebrities. ESA and the European Southern Observatory are producing their own LIVE segment on June 30. You can watch the entire 48-hour broadcast from our Asteroid Day website or via satellite TV (SES Network)

12:30pm Research Collaborations

Brian Cox discusses the importance of research collaboration with panelists, Mario Juric, Chuck Beames, Patrick Michel, Ed Lu, Gary Martin, Ian Carnelli.

1:00pm: Why are Astronauts fascinated with Asteroids?

Rusty Schweickart discusses with Matthias Maurer, Ed Lu, and Dorin Prunariu about their fascination with asteroids.

1:30pm Role of Asteroids

Brian Cox: Role of asteroids in creation of solar system

2pm Can we survive on Earth and what should be next? Mars vs Moon?

Brian Cox asks Richard Dawkins, Pete Worden, Ed Lu, Mark Boslough and Matthias Maurer the big questions surrounding asteroids and space travel

2:30pm What happens when Asteroids hit?

Brian Cox hosts Patrick Michel, Matt Dawson, Mark Boslough, Eric Buttini, and Debbie Lewis to discuss the history of asteroids hitting the earth and how we need to start preparing for future asteroid strikes.

3:00pm The importance of science in today's world

Brian Cox discusses with Richard Dawkins, Mark Boslough, Stuart Clark, Alan Fitzsimmons, Patrick Michel about the current state of science in today's world and the importance of making it a priority in today's society.

3:30pm Asteroid Discovery and Telescopes

Brian Cox discusses with Alan Fitzsimmons, Mark Boslough, Mario Juric, Ed Lu, and Matt Dawson about how asteroid surveying has evolved and the role telescopes play in discovering new asteroids.

Asteroid Day LIVE is distributed globally on 29 June through 1 July, via a SES satellite network and available on various local channels subscribing to the <u>SES satellite network</u>, and the <u>Asteroid Day website</u>. If your media outlet would like to provide the Asteroid Day broadcast on any of your digital platforms, you can either downlink any and all of the feed from our satellite directly, or request CDN access to stream the broadcast through their platforms natively.

Satellite Information

Astra 1L @19.2 East	Downlink Frequency: 11288.00 MHz
Service Name: Asteroid Day 2018	Polarization: Vertical
Service ID: 4299	Modulation: DVB-S2 8PSK
Transponder: 1.006	FEC: 2/3
Orbital Pos: 19.2 East	SR: 22 MSym/s



100X DECLARATION

A declaration calling for a 100 times increase in the awareness and tracking of dangerous asteroids. To date, they have been joined by more than 17,000 world citizens.

Signers of the 100X Declaration number more than 200 leaders in Business, Aerospace, Science and government, and more than 5000 concerned citizens.

- Science: Stephen Hawking, Richard Dawkins, Jane Luu, Helen Sharman, Jill Tarter, Brian Cox, Lord Martin Rees, Astronomer Royal of the UK.
- o Astronauts: Tom Jones, Chris Hadfield, Ed Lu.
- Entertainment: Terry Gilliam, Stephen Fry, Peter Gabriel, Brian May, Broken Bells, Will Wright, David Braben
- Business: David Liddle, Shervin Pishevar, Steve Jurvetson, Jeffrey Baehr, Anousheh Ansari,
 Alan Eustace, Chris Anderson, Sasha Galitsky

For a full listing of signers of the 100X Declaration, visit:

https://asteroiddav.org/about/our-team/#hash_filters=100x-declaration-signatories

KEY MESSAGES

What is Asteroid Day?

- Asteroid Day is a UN sanctioned global day of education to raise awareness about asteroids and in particular how we protect Earth from asteroid impacts.
- Asteroid Day is held each year on June 30, the anniversary of the largest asteroid impact of Earth in recent history (Tunguska, Siberia, June 30, 1908)
- Asteroid Day reminds us that we are citizens of our Universe [crew of Spaceship Earth] and stewards of our Planet and it is our responsibility to learn about asteroids.

Asteroid Facts

- Asteroids are rocky objects, left over from the formation of planets in our solar system. Like
 planets, asteroids orbit the Sun, but most are contained in the Asteroid Belt between Mars and
 Jupiter.
- Asteroids pose a risk to the earth, but although the threat is low in any one year, the consequences can be serious. The earth is hit by a hundred tons of meteorites a day and there are a million or so asteroids we haven't identified which could post a major threat to Earth's major metropolitan cities.
- We have the technological capability to detect and track and deflect dangerous ones away from impacting Earth

Who Supports Asteroid Day?

- Asteroid Day is supported by international organizations, government agencies, local communities and leaders in science, technology, education, business and entertainment.
- Major sponsors of Asteroid Day 2018 include the Government of Luxembourg, B612
 Foundation, Broadcasting Centre Europe (BCE), SES, and Tomorrow Street, a joint venture of



Vodaphone and Technoport. Asteroid Day is a program of the Asteroid Foundation, a Luxembourg-based nonprofit organization.

• Media partners: Discovery Communications, Astronomy Magazine

Who attends Asteroid Day events and where?

- What makes Asteroid Day so successful are the volunteers and hosts of global events held around the world in more than 90 countries. To date we have 190 regional coordinators across 120 countries.
- Participants in Asteroid Day include people of all ages, from scientists, technologists, community leaders to students - anyone interested in learning about asteroids and helping to protect our planet from dangerous impacts.
- Our goal for June 30, 2018 is 1500 self-organized educational events held on all 5 continents.
- In 2018, Asteroid Day will hold 48-hour live broadcast from Luxembourg: See: A full listing of events can be found at

What is Asteroid Day LIVE and How Can I Watch?

From 29 June to 1 July, asteroids are the focus of a conversation shared around the world on the global 48-hour Asteroid Day Live broadcast about space and the role of asteroids in our solar system.

Asteroid Day LIVE, produced by Asteroid Day and sponsored by OHB, BCE and the Government of Luxembourg, will be distributed around the world via a dedicated SES satellite network. The 48-hours of programming will be hosted by Professor Brian Cox, prominent British physicist, author and BBC commentator, who will be joined in studio and around the world by famed astronauts, and expert scientists, technologists and researchers in planetary science.

Satellite Information

Astra 1L @19.2 East	Downlink Frequency: 11288.00 MHz
Service Name: Asteroid Day 2018	Polarization: Vertical
Service ID: 4299	Modulation: DVB-S2 8PSK
Transponder: 1.006	FEC: 2/3
Orbital Pos: 19.2 East	SR: 22 MSym/s





ASTEROID DAY IS A UNITED NATIONS OFFICIAL DAY OF EDUCATION AND AWARENESS ABOUT PLANETARY SCIENCE

How does the United Nations Support Asteroid Day?

In 2016, the <u>United Nations General Assembly</u> recognized Asteroid Day as an official UN event and declared it to be held internationally each year on June 30, the anniversary of the largest asteroid impact in recent history, the 1908 Tunguska impact. The UN resolution invites all United Nations Member States, organizations of the United Nations system, other international and regional organizations, as well as civil society, including non-governmental organizations and individuals to observe Asteroid Day.



Asteroid Day Press Conference at Cisco Systems Luxembourg. Feb 14, 2017. Danica Remy, Etienne Schneider and Grig Richters (from left to right). Photo by: Max Alexander



ROLE OF THE LUXEMBOURG GOVERNMENT

Etienne Schneider, Deputy Prime Minister and Minister of the Economy of Luxembourg, has explained his country's "leading role related to asteroids, within the framework of the SpaceResources.lu initiative. Luxembourg aims to contribute to the peaceful exploration and sustainable utilization of resources from celestial bodies. While asteroids might be seen as a threat to our planet, they are a tremendous opportunity. Indeed, the use of space resources, both on earth and in space, holds great potential for future technological innovation, economic activity and growth with a promise of ecological and social benefits for humanity. To ensure that this vision becomes a reality, we have to increase our knowledge and understanding of asteroids and Near Earth Objects."

PRINCIPAL ASTEROID DAY SPONSORS



SES is the world's leading satellite operator and the first to deliver a differentiated and scalable GEO-MEO offering worldwide, with more than 50 satellites in Geostationary Earth Orbit (GEO) and 12 in Medium Earth Orbit (MEO). SES focuses on value-added, end-to-end solutions in two key business units: SES Video and SES Networks. The company provides satellite communications services to broadcasters, content and internet service providers, mobile and fixed network operators, governments and institutions. SES's portfolio includes the ASTRA satellite system, which has the largest Direct-to-Home (DTH) television reach in Europe, O3b Networks, a global managed data communications service provider, and MX1, a leading media service provider that offers a full suite of innovative digital video and media services. Further information available at: www.ses.com

Quote from Ruy Pinto, SES Deputy Chief Technology Officer:

"At SES, we value technology as a tool to improve and save lives. We are proud to sponsor this global awareness campaign that will bring collaboration where people from around the world come together to learn about asteroids, the impact hazard they may pose, the resources they may one day yield and what we can do to ensure we have the best technology available to protect our planet."



BCE is a European leader in media services, system integration and software development in the areas



of television, radio, production and postproduction, telecommunication and IT. With its extensive experience on the media market, our team provides high-quality services and will always find the solution that matches your project and budget. With more than 200 highly qualified and motivated personnel, BCE serves about 400 clients in various sectors, such as TV channels, radio stations, film distributors, producers, advertising companies, telecommunications operators and public services. Further information available at: www.bce.lu

Quote from Tun Van Rijswick, COO at BCE:

"While Asteroid Day focuses mainly in informing the population about asteroid science and future planetary defense, we believe that this information will need to be delivered to the world with the smartest solutions available. Whereas it is through file-based distribution solutions, media, television, radio or satellite, BCE has an extended expertise in media distribution, allowing the best communication before and maybe during or even after any impact."



Luxembourg is offering an ideal overall framework for the exploration and commercial utilization of resources from 'celestial bodies' such as asteroids or from the moon. By supporting innovative R&D projects in the frame of the SpaceResources.lu initiative, including direct investments in companies active in such advanced space technologies, the Grand Duchy aims to be at the forefront of the next stage of development in the space industry. Space is one of the priority sectors that Luxembourg has constantly promoted since its entry into the space business more than 35 years ago. One of the country's biggest successes in space was the government-supported SES created in 1985, which is the largest commercial satellite operator in the world today. The SpaceResources.lu initiative is developed and implemented under the political responsibility of the Deputy Prime Minister and Minister of the Economy, Étienne Schneider to position Luxembourg as a European hub for the utilization of space resources. Further information available at: www.spaceresources.public.lu/en

Quote from Étienne Schneider, Luxembourgish Deputy Prime Minister and Minister of the Economy:

"We are very pleased to host the Asteroid Day event in Luxembourg, enhancing the excitement that our SpaceResources.lu initiative is generating across the world," stated Deputy Prime Minister and Minister of the Economy, Étienne Schneider. "The partnership with the Asteroid Day activities is offering the Grand Duchy an additional opportunity to set its course in the space sector where the country is becoming increasingly important."





Gathering more than 90,000 affiliated members, accounting for 75 % of total employment and representing 80% of GDP, the Chamber of Commerce is the major professional chamber of the Grand-Duchy of Luxembourg. Established in 1841, two years after the Grand-Duchy of Luxembourg gained independence, the public institution is the guardian of the interests of the companies of all sectors of business (aside from agriculture and crafts).

The operational missions of the Luxembourg Chamber of Commerce are:

- 1. Involvement in the legislative procedure by the preparation of opinions
- 2. Promoting the spirit of enterprise and the creation and development of businesses
- 3. Promoting foreign economic and commercial relations
- 4. Fostering a system of education and training that meets the needs of businesses
- 5. Providing services to business and the general public
- 6. Informing the public and stimulating debate as partner and independent ambassador of the market economy (think tank and proposals of policy)

Further information available at: www.cc.lu

Quote from Carlo Thelen, Director General of the Chamber of Commerce

"Since Luxembourg's space mining program will include an intensive mapping of near-earth objects (NEOs) such as asteroids it has been a natural and logical step to partner up with Asteroid Day."



The Luxembourgish Aerospace Association – GLAE was founded as a non-profit organization in February 2005. GLAE was set up following the Grand Duchy of Luxembourg's adhesion to the European Space Agency (ESA) and offers Luxembourgish companies the opportunity to create synergies at the national and European level for both the private and public sector. GLAE:

- represents the interests of Luxembourg's aerospace industry on a national and international level
- promotes Luxembourg industrial interests in the space sector and in the related international



organisations

- acts as cooperation platform for national industry and research
- is the privileged partner and actively supports the Luxembourgish government and authorities in the elaboration and implementation of Space sector policies and strategies
- supports and advises the Luxembourg government in relation to the work of the joint working group Grand-Duchy of Luxembourg/ESA

GLAE gathers the following Luxembourg companies: LuxGovSat S.A., GRADEL S.A., GT Satellite Systems S.A., HITEC Luxembourg S.A., LUXSPACE Sàrl, POST Luxembourg, SES S.A., TELINDUS S.A. as well as the agency LUXINNOVATION GIE.

APPROVED ASTEROID DAY OUOTES

Note to Media: All Asteroid Day Expert Panel members are profiled on the Asteroid Day website: http://asteroidday.org/asteroid-day-expert-panel/

Professor Stephen Hawking: "One of the major threats to intelligent life in our universe is a high probability of an asteroid colliding with inhabitable planets."

Asteroid Day co-founders Brian May (Queen guitarist, astrophysicist), Danica Remy (President of B612), Grig Richters (Filmmaker) and Rusty Schweickart (Apollo 9 astronaut): "Today the United Nations General Assembly has officially declared June 30 as the International Asteroid Day. We founded the annual event to raise awareness of the asteroid threat and opportunity to unite the human species behind a simple goal: Protect our planet from asteroid impacts. It is the only natural disaster we know how to prevent if we work together towards a global solution. We are all crew members of spaceship Earth. We hope you will join us."

Dr. Brian May, astrophysicist, guitarist and songwriter for QUEEN, Co-Founder, Asteroid Day. "Our goal is to dedicate one day each year to learn about asteroids, the origins of our universe, and to support the resources necessary to see, track and deflect dangerous asteroids from Earth's orbital path," explains "Asteroids are a natural disaster we know how to prevent."

Ed Lu, three time NASA astronaut and CEO of B612 who co-invented the Gravity Tractor, a proposed technique for asteroid deflection: "The United Nations declaration of Asteroid Day is a testament to the importance of the international work by scientists and engineers around the world to protect the Earth from asteroid impacts. If we do our job properly, the Earth should never be hit again by another large asteroid!"

Romanian astronaut Dorin Prunariu: "Asteroid Day is an annual event to inform and educate the general public on asteroids hazard and on the activities that are undertaken in connection with this hazard to protect our planet and its population. Recognition of this event by the UN General Assembly on the proposal of ASE comes as a natural and necessary consequence that complements other initiatives related to NEO taken by the UN and by other national and international organizations."



Canadian Astronaut Chris Hadfield: 'The Earth gets hit by about 40 tons of small asteroids and their dust each day. But occasionally there is a big one that causes havoc, and we need to do what makes sense, together, to be ready.'

Etienne Schneider, Deputy Prime Minister of Luxembourg: "We are delighted to see the United Nations join in promoting awareness of Asteroids as an opportunity for mankind and for future peaceful exploration."

Apollo 9 Astronaut Rusty Schweickart: "If we can track the trajectories of asteroids and monitor their movement in our solar system, then we can know if they are on a path to impact Earth," said "If we find them early enough, we can move them out of Earth's orbit - thus preventing any kind of major natural disaster."

British astronaut Tim Peake: "All the best for Asteroid Day. We only have one Earth so let's do all we can to protect it."

Lord Martin Rees, Astronomer Royal, UK: "The ancients were correct in their belief that the heavens and the motion of astronomical bodies affect life on Earth - just not in the way they imagined. Sometimes those heavenly bodies run into Earth. This is why we must make it our mission to find asteroids before they find us."

Tom Jones, Scientist, Author, Pilot and Veteran NASA Astronaut with four Shuttle missions and three spacewalks: "Asteroid Day is a great opportunity to invite the public to learn more about the hazard from near-Earth asteroids, and to invite their support of international efforts to discover and head off rogue asteroids. We study asteroids both to protect the Earth and to protect valuable resources for future exploration toward Mars."

Dante Lauretta, Professor of Planetary Science, University of Arizona: "Asteroid represents humanity's growing awareness of the opportunities and hazards that exist in near-Earth space. Our future depends on our ability to identify, characterize, and ultimately travel to these asteroids."

Peter Brown, Professor, University of Western Ontario: "Asteroid Day reminds us we are literally connected with the rest of the Universe. Earth is not an isolated System."

Mark Boslough, Technologist, Sandia National Labs: "We need to study asteroids because they are hazardous, but also because they are scientifically interesting, potential resources, and exciting objects for space exploration."

Debbie Lewis, Specialist, Risk Management and Disaster Management, Axiom:

"We need to study asteroids because it is a case of 'when, not if,' therefore we need to more fully and better understand the risk they pose to humanity and to prepare effective contingency plans, for civil protection, in the unlikely event that mitigation methods for asteroid deflection are not successful."

Sigrid Close, Assistant Professor of Astronautics, Stanford University: "By studying asteroids, we can understand how hypervelocity objects ablate, ionize and form plasma that then interacts and influences the background atmosphere and ionosphere."



Vishnu Reddy, Lunar and Planetary Laboratory, University of No. Dakota: "Life will probably begin and end with an asteroid impact."

Eric Christensen, Director, Catalina Sky Survey: "Studying asteroids allows us to look both backward and forward in time; they inform our understanding of the birth and evolution of the Solar System, and potential future impacts present an incentive to catalog and characterize the risk they pose to human populations."

Patrick Michel, Lead Researcher, CNRS: "Considered the building blocks of our planets, asteroids provide us with tantalizing glimpses of the earliest nature of our solar system. Moreover, asteroid collisions have to be seen as representing an important threat against human efforts in space, which in an extreme case, could even lead to the destruction of our biosphere. Thus, asteroids matter much to scientists, to explorers, and to the future of humanity."

Christian Koeberl, Cosmochemist, University of Vienna: "Asteroids (and their messenger to Earth, the meteorites) are witnesses of the origin of the solar system and tell us about physical and chemical processes at that time. Asteroid Day helps to educate us about impacts on Earth and elsewhere - their scientific importance and the danger associated with them."

Lynne Jones, Research Associate, LSST: "Asteroids are remnants of the planet formation processes in our Solar System and by studying their orbital distribution and chemical composition, we can learn about how planets formed and evolved over the history of the Solar System.

Discovery Science: "Discovery Science, the only global network dedicated entirely to the wonders of science, is proud have a media partnership with Asteroid Day, in an effort to increase awareness about the hazards of asteroids and what can be done to protect humankind from potential future impacts.

Quotes in Spanish, Hebrew, German, French and Italian

German astronaut Alexander Gerst (German): "Wird ein Asteroid wieder die Erde treffen? Die Frage ist nicht "ob?", sondern "wann?". Eine andere Frage lautet: Werden wir dann in der Lage sein, uns davor zu schützen? Diese Frage kann die Raumfahrt auch beantworten."

Alan Harris, German Aerospace Center (DLR) Senior Scientist and NEOShield Project Coordinator (German): "Aktuell sind erst annähernd 15000 erdnahe Objekte (near-Earth objects: NEO; Asteroiden und Kometen) entdeckt worden und jeden Tag werden circa 4 weitere gefunden. Während wir ungefähr wissen wie viele Objekte pro Größenklasse sich in erdnahen Umlaufbahnen bewegen wissen wir bisher nur sehr wenig über ihre physikalische Eigenschaften, wie ihre Zusammensetzung, ihre Dichte oder Struktur. Befristete Projekte wie NEOShield-2 helfen uns zu verstehen wie wir einen Asteroiden optimal ablenken können aber wir müssen immer noch viel mehr lernen, nicht nur über NEOs im Allgemeinen sondern auch über die technische Machbarkeit von Abwehrmethoden und deren Leistungsfähigkeit. Kurz gesagt: wir brauchen eine langfristige, international koordinierte Strategie zum Schutz der Menschen und zur Abwehr von Einschlägen erdnaher Objekte auf der Erde."



US astronaut Garrett Reisman and first Jewish crewmember on the ISS (Hebrew):

שלום ובוקר טוב"

אני גארט רייסמן , לשעבר אסטרונאוט בנאסא וחבר הצוות היהודי הראשון על תחנת החלל הבינלאומית . אני שמח להצטרף אליכם באמצעות ההודעה הזו ואני נרגש מאוד מהתפשטות יום האסטרואיד בעולם ואני ממש שמח שלכולכם בישראל כלכך אכפת מהנושא הזה ואתם מוכנים להתערב ולעזור לנו להגן על הכוכב השברירי שלנו . מוני כיום האסטרואיד הבינלאומי , יום המודעות לאסטרואידים ולסכנה שהם מהווים לאנושות הארץ . ולהגנה על כדור הארץ .

זה נהדר שגם ישראל מציינת את היום הזה יחד עם כולנו בכל העולם. אז הצטרפו אלינו ב 30 ביוני וקחו חלק ביום האסטרואיד בישראל. שוב שלום ואני מקווה לראות את כולכם בישראל בקרוב מאוד. ביי ביי

Spanish astronaut Pedro Duque (Spanish): "Todos los astronautas estamos concienciados del riesgo de impacto de la Tierra con asteroides. Por eso nuestra Asociación de Exploradores del espacio apoya decididamente el desarrollo de tecnologías operacionales para poderlos detectar y desviar. Es para mí una gran satisfacción ver como el día de hoy la Asamblea General de las Naciones Unidas ha declarado el 30 de Junio como "Día Internacional del Asteroide", reconociendo el valor del evento anual de concienciación de la sociedad que venimos celebrando desde 2014."

Italian astronaut Luca Parmitano (Italian): "La minaccia da parte degli asteroidi è un problema internazionale che dovrebbe essere affrontato globalmente, interessando ad ogni livello tutte le nazioni coinvolte nell'avventura spaziale: dalle istituzioni educative ai centri di ricerca e alle agenzie spaziali."