

# WGSBN Bulletin 

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Cover image: Color image of (486958) Arrokoth, obtained by the New Horizons spacecraft. Courtesy NASA/Johns Hopkins University Applied Physics Laboratory/Southwest Research Institute/Roman Tkachenko.

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## Errata

The following section corrects errors that have appeared in this publication (indicated as Bull., with volume, issue and page number) or in names or citations published in the Minor Planet Circulars. Negative line numbers count from the bottom of the page (in the Bulletin) or from the bottom of the page or the bottom of the (second) column (in the MPCs).

| Reference | Line(s) |  |
| :---: | :---: | :---: |
| MPC 57950 | 7 | For Niemela read Niemelä [(5289) name] |
| MPC 57950 | 10 | For Virpi Niemela read Virpi Niemelä [(5289) citation] |
| Bull. 3, \#4, 8 | - 3 to - 1 | For Cami did his graduate studies at the University of Amsterdam and Vrije Universiteit Brussel. He read Cami completed his PhD at the University of Amsterdam. He is Director of the Hume Cronyn Observatory, and he [(291824) citation] |

## New Names of Minor Planets

The following new names of minor planets have been approved by the WGSBN. Discovery details, for information only, are given in the following order: date of discovery; discoverer(s) name(s); discovery site; discovery site observatory code. The discoverer(s) names(s) is/are followed by an asterisk if this is a change from what was published when the object was numbered.

## (12077) Frankthorne $=1998 \mathrm{FZ}_{70}$

Discovery: 1998-03-20 / LINEAR / Socorro / 704
Frank Thorne mentored a finalist in the 2019 Regeneron Science Talent Search, a science competition for high school seniors. He teaches at the University School of Milwaukee, Milwaukee, Wisconsin.
(12078) Ikezi $=1998$ FJ $_{72}$

Discovery: 1998-03-20 / LINEAR / Socorro / 704
Chihiro Ikezi mentored a finalist in the 2019 Regeneron Science Talent Search, a science competition for high school seniors. He teaches at the Saint Francis High School, Mountain View, California.
(12083) Darone $=1998$ FS $_{121}$

Discovery: 1998-03-20 / LINEAR / Socorro / 704
Gregory Darone mentored a finalist in the 2019 Regeneron Science Talent Search, a science competition for high school seniors. He teaches at the Charter School of Wilmington, Wilmington, Delaware.
(12085) Susanmoore $=1998 \mathbf{H V}_{19}$

Discovery: 1998-04-18 / LINEAR / Socorro / 704
Susan Moore mentored a finalist in the 2019 Regeneron Science Talent Search, a science competition for high school seniors. She teaches at the Horace Greeley High School, Chappaqua, New York.

## (12092) Erinorourke $=1998 \mathrm{HH}_{97}$

Discovery: 1998-04-21 / LINEAR / Socorro / 704
Erin O'Rourke mentored a finalist in the 2019 Regeneron Science Talent Search, a science competition for high school seniors. She teaches at the Syosset High School, Syosset, New York.

## (12097) Peterlowen $=1998 \mathbf{H G}_{121}$

Discovery: 1998-04-23 / LINEAR / Socorro / 704
Peter Lowen mentored a finalist in the 2019 Regeneron Science Talent Search, a science competition for high school seniors. He teaches at the Ravenwood High School, Brentwood, Tennessee.

## (12107) Reneebarcia $=1998$ KU $_{46}$

Discovery: 1998-05-22 / LINEAR / Socorro / 704
Renee Barcia mentored a finalist in the 2019 Regeneron Science Talent Search, a science competition for high school seniors. She teaches at the Herricks High School, New Hyde Park, New York.

## (12108) Jamesaustin $=1998 \mathrm{KJ}_{48}$

Discovery: 1998-05-22 / LINEAR / Socorro / 704
James Austin mentored a finalist in the 2019 Regeneron Science Talent Search, a science competition for high school seniors. He teaches at the Garnet Valley High School, Glen Mills, Pennsylvania.
(12120) Rebeccagrella $=1999 \mathrm{NQ}_{41}$

Discovery: 1999-07-14 / LINEAR / Socorro / 704
Rebecca Grella mentored a finalist in the 2019 Regeneron Science Talent Search, a science competition for high school seniors. She teaches at the Brentwood High School - Sonderling Center, Brentwood, New York.
(12121) Greenwald $=1999$ NX $_{48}$

Discovery: 1999-07-13 / LINEAR / Socorro / 704
Stephanie Greenwald mentored a finalist in the 2019 Regeneron Science Talent Search, a science competition for high school seniors. She teaches at the Byram Hills High School, Armonk, New York.
(12503) Danielpeterson $=1998 \mathrm{FC}_{75}$

Discovery: 1998-03-24 / LINEAR / Socorro / 704
Daniel Peterson mentored a finalist in the 2019 Regeneron Science Talent Search, a science competition for high school seniors. He teaches at the Interlake High School, Bellevue, Washington.

## (12508) Darcysloe = 1998 FZ $_{113}$

Discovery: 1998-03-31 / LINEAR / Socorro / 704
Darcy Sloe mentored a finalist in the 2019 Regeneron Science Talent Search, a science competition for high school seniors. She teaches at the Montgomery Blair High School, Silver Spring, Maryland.

## (12516) Karenyoung $=1998$ HB $_{45}$

Discovery: 1998-04-20 / LINEAR / Socorro / 704
Karen Young mentored a finalist in the 2019 Regeneron Science Talent Search, a science competition for high school seniors. She teaches at the Paul Laurence Dunbar High School, Lexington, Kentucky.

## (12525) Kathleenloia $=1998$ HT $_{147}$

Discovery: 1998-04-23 / LINEAR / Socorro / 704
Kathleen Loia mentored a finalist in the 2019 Regeneron Science Talent Search, a science competition for high school seniors. She teaches at the Lynbrook High School, San Jose, California.

## (12535) Fazlurahman $=1998$ MZ $_{30}$

Discovery: 1998-06-24 / LINEAR / Socorro / 704
Fazlur Rahman mentored a finalist in the 2019 Regeneron Science Talent Search, a science competition for high school seniors. He teaches at the Oklahoma School of Science and Mathematics, Oklahoma City, Oklahoma.

## (12545) Taniamurphy $=1998$ QT $_{19}$

Discovery: 1998-08-17 / LINEAR / Socorro / 704
Tania Murphy mentored a finalist in the 2019 Regeneron Science Talent Search, a science competition for high school seniors. She teaches at the Lakeside High School, Atlanta, Georgia.
(12571) Occhiogrosso $=1999 \mathrm{NM}_{2}$

Discovery: 1999-07-12 / LINEAR / Socorro / 704
Justin Occhiogrosso mentored a finalist in the 2019 Regeneron Science Talent Search, a science competition for high school seniors. He teaches at the Harriton High School, Rosemont, Pennsylvania.

## (12586) Juliaspeyer $=1999$ RQ $_{81}$

Discovery: 1999-09-07 / LINEAR / Socorro / 704
Julia Speyer mentored a finalist in the 2019 Regeneron Science Talent Search, a science competition for high school seniors. She teaches at the Brookline High School, Brookline, Massachusetts.

## (12936) Glennschneider $=\mathbf{2 5 4 9}$ P-L

Discovery: 1960-09-24 / C. J. van Houten, I. van Houten-Groeneveld, T. Gehrels / Palomar / 675
Glenn Schneider (b. 1955), American astronomer emeritus at the University of Arizona, is PI for the proposed EXCEDE space telescope and was project scientist for the NICMOS spectrometer on the HST. He has attended 35 total solar eclipses since 1970, including $9^{\mathrm{m}} 23^{\mathrm{s}}$ of totality from a jet over the South Pacific for the eclipse of 2010.

## (14291) Savereide $=1104$ T-1

Discovery: 1971-03-25 / C. J. van Houten, I. van Houten-Groeneveld, T. Gehrels / Palomar / 675
Named for Paul (b. 1960) and Barbara Savereide (b. 1964) and their two children, Erik (b. 2006) and Laura (b. 2008). Barb is the sister of D. W. E. Green, who made the identifications for this minor planet.
(15634) Ahluwalia $=2000 \mathbf{~ J D}_{15}$

Discovery: 2000-05-06 / LINEAR / Socorro / 704
Rohan Ahluwalia (b. 2002) was awarded second place in the 2019 Intel International Science and Engineering Fair for his biomedical engineering project. He attended the Westview High School, Portland, Oregon, U.S.A.
(15954) Divjotbedi $=1998$ BG $_{\mathbf{1 1}}$

Discovery: 1998-01-23 / LINEAR / Socorro / 704
Divjot Singh Bedi (b. 2002) was awarded second place in the 2019 Intel International Science and Engineering Fair for his embedded systems team project. He attended the Thomas Jefferson High School for Science and Technology, Alexandria, Virginia, U.S.A.

## (15985) Bhatnagar $=1998 \mathbf{W U}_{\mathbf{2 0}}$

Discovery: 1998-11-18 / LINEAR / Socorro / 704
Amogh Bhatnagar (b. 2001) was awarded second place in the 2019 Intel International Science and Engineering Fair for his biochemistry project. He attended the University School of Milwaukee, Milwaukee, Wisconsin, U.S.A.
(16016) Boylan $=1999$ CB $_{54}$

Discovery: 1999-02-10 / LINEAR / Socorro / 704
Jack Boylan (b. 2001) was awarded second place in the 2019 Intel International Science and Engineering Fair for his biochemistry team project. He attended the duPont Manual High School, Louisville, Kentucky, U.S.A.

## (16034) Prechoudhary $=1999 \mathrm{FW}_{32}$

Discovery: 1999-03-24 / LINEAR / Socorro / 704
Prerit Choudhary (b. 2002) was awarded second place in the 2019 Intel International Science and Engineering Fair for his biomedical engineering project. He attended the College Park High School, The Woodlands, Texas, U.S.A.

## (16048) Eddiedai $=1999 \mathbf{~ J U}_{23}$

Discovery: 1999-05-10 / LINEAR / Socorro / 704
Eddie Dai (b. 2002) was awarded second place in the 2019 Intel International Science and Engineering Fair for his cellular and molecular biology project. He attended the Olathe North High School, Olathe, Kansas, U.S.A.

## (16055) Dellisanti $=1999 \mathrm{JQ}_{56}$

Discovery: 1999-05-10 / LINEAR / Socorro / 704
Jack Delli-Santi (b. 2001) was awarded second place in the 2019 Intel International Science and Engineering Fair for his earth and environmental sciences project. He attended the Lake Travis High School, Austin, Texas, U.S.A.
(16058) Doshi $=1999 \mathbf{J P}_{75}$

Discovery: 1999-05-06 / LINEAR / Socorro / 704
Rajat Kaushik Doshi (b. 2001) was awarded second place in the 2019 Intel International Science and Engineering Fair for his chemistry project. He attended the Henry B. Plant High School, Tampa, Florida, U.S.A.
(16060) Dahliadry $=1999 \mathrm{JZ}_{89}$

Discovery: 1999-05-12 / LINEAR / Socorro / 704
Dahlia Dry (b. 2000) was awarded first place in the 2019 Intel International Science and Engineering Fair for her physics and astronomy project. She attended the Fort Myers High School, Fort Myers, Florida, U.S.A.

## (16067) Brandonfan $=1999$ RA $_{47}$

Discovery: 1999-09-07 / LINEAR / Socorro / 704
Brandon Xu Fan (b. 2002) was awarded second place in the 2019 Intel International Science and Engineering Fair for his systems software project. He attended the Blacksburg High School, Blacksburg, Virginia, U.S.A.

## (16080) Danielfeng $=1999$ RX $_{184}$

Discovery: 1999-09-09 / LINEAR / Socorro / 704
Daniel Feng (b. 2003) was awarded second place in the 2019 Intel International Science and Engineering Fair for his microbiology project. He attended the University High School, Irvine, California, U.S.A.

## (16087) Rhythmgarg $=1999$ TR $_{102}$

Discovery: 1999-10-02 / LINEAR / Socorro / 704
Rhythm Garg (b. 2002) was awarded second place in the 2019 Intel International Science and Engineering Fair for his behavioral and social sciences project. He attended the Texas Academy of Mathematics and Science, Denton, Texas, U.S.A.

## (16088) Jessgoldstein $=1999 \mathbf{T J}_{\mathbf{1 2 1}}$

Discovery: 1999-10-04 / LINEAR / Socorro / 704
Jessica Michelle Goldstein (b. 2001) was awarded second place in the 2019 Intel International Science and Engineering Fair for her behavioral and social sciences project. She attended the Plainview-Old Bethpage John F. Kennedy High School, Plainview, New York, U.S.A.

## (16100) Hausknecht $=1999$ VO $_{30}$

Discovery: 1999-11-03 / LINEAR / Socorro / 704
Kaylie Hausknecht (b. 2001) was awarded best of category and first place in the 2019 Intel ISEF for her physics and astronomy project. She also received the European Union Contest for Young Scientists Award. She attended the Lynbrook Senior High School, Lynbrook, New York, U.S.A.

## (16117) Herbst $=1999$ XS $_{29}$

Discovery: 1999-12-06 / LINEAR / Socorro / 704
Hannah Herbst (b. 2000) was awarded best of category and first place in the 2019 Intel International Science and Engineering Fair for her translational medical science project. She attended the Florida Atlantic University High School, Boca Raton, Florida, U.S.A.

## (16125) Carriehsu $=1999$ XK $_{86}$

Discovery: 1999-12-07 / LINEAR / Socorro / 704
Carrie Hsu (b. 2002) was awarded second place in the 2019 Intel International Science and Engineering Fair for her embedded systems project. She attended the Herricks High School, New Hyde Park, New York, U.S.A.

## (16148) Amaraifeji $=1999$ XG $_{188}$

Discovery: 1999-12-12 / LINEAR / Socorro / 704
Amara Precious Ifeji (b. 2001) was awarded best of category and first place in the 2019 Intel International Science and Engineering Fair for her plant sciences project. She attended the Bangor High School, Bangor, Maine, U.S.A.
(16169) Janapaty $=2000 \mathbf{A O}_{95}$

Discovery: 2000-01-04 / LINEAR / Socorro / 704
Shloka V. Janapaty (b. 2002) was awarded second place in the 2019 Intel International Science and Engineering Fair for her environmental engineering project. She attended the Presentation High School, San Jose, California, U.S.A.

## (16172) Jayaweera $=\mathbf{2 0 0 0 ~ A Z} \mathbf{g}_{97}$

Discovery: 2000-01-04 / LINEAR / Socorro / 704
Milidu Jayaweera (b. 2004) was awarded second place in the 2019 Intel International Science and Engineering Fair for his robotics and intelligent machines project. He attended the La Cueva High School, Albuquerque, New Mexico, U.S.A.
(34125) Biancospino $=\mathbf{2 0 0 0}$ QZ

Discovery: 2000-08-23 / S. Sposetti / Gnosca / 143
Several trees of this hawthorn (Crataegus monogyna, family Rosaceae) grow near the observatory where this minor planet was discovered. They display white flowers in spring and red fruits in autumn. The Italian name of this tree is "biancospino".

## (34126) Cornaa $=2000$ QA $_{1}$

Discovery: 2000-08-23 / S. Sposetti / Gnosca / 143
Several cornels (Cornus mas, family Cornaceae) grow around the observatory. They display small yellow flowers in late winter and red berries in summer. Their wood is very hard and their fruits are edible. The local dialect name of this tree is "cornaa".

## (43305) Camillebibles $=\mathbf{2 0 0 0} \mathbf{G H}_{142}$

Discovery: 2000-04-07 / LONEOS / Anderson Mesa / 699
Camille D. Bibles (b. 1961) is a US Magistrate Judge who had a successful career litigating cases in state, federal and international courts. Her legal career began in Northern Arizona, and she returned due to her passion for nature and the night sky. Camille is a Trustee of the Lowell Observatory Foundation.

## (44167) Patriciaquinn $=1998 \mathbf{J A}_{3}$

Discovery: 1998-05-01 / LONEOS / Anderson Mesa / 699
Patricia Quinn (b. 1956) had a career as an engineer managing water projects in the US. She is committed to STEM experiences for Lowell Observatory guests of all ages. Pat became a member of the Lowell Observatory Advisory Board in 2022.

## (44195) Cordova $=1998$ MW $_{7}$

Discovery: 1998-06-19 / LONEOS / Anderson Mesa / 699
Michael Cordova (b. 1956) had a career as an airline pilot in the US. During his career, he identified celestial objects for his colleagues in the cockpit. He was often surprised that they had no knowledge of the planets. Michael became a member of the Lowell Observatory Advisory Board in 2022.

## (44206) Clareschneider $=1998$ OM

Discovery: 1998-07-17 / LONEOS / Anderson Mesa / 699
Clare Schneider (b. 1962) is an American technical writer who is a dark skies enthusiast in the US. She is a longtime Flagstaff resident who has spent many hours gazing through telescopes at Lowell Observatory. Clare has introduced many friends to the joy of telescope viewing at the observatory.
(45596) Molliesugden $=2000$ CF $_{112}$

Discovery: 2000-02-07 / CSS / Catalina / 703
Born in West Yorkshire, England, actress Mollie Sugden (1922-2009) is best remembered as Mrs. Betty Slocombe on the British TV comedy Are You Being Served? Her character was known for her changes in hair color, as well as her affection for her cat. The series ran between 1972 and 1985.

## (47052) Guillaumefaury $=1998$ XE $_{1}$

Discovery: 1998-12-07 / ODAS / Caussols / 910
Guillaume Faury (b. 1976) is a research engineer at the Institut de Recherche en Astrophysique et Planétologie (Toulouse). An expert in space image analysis, he worked on the Rosetta mission and successfully located the Philae lander on the surface of 67P. He has produced many anaglyph 3D views for the CNES archive.

## (50553) Dilles $=2000$ EL $_{21}$

Discovery: 2000-03-03 / CSS / Catalina / 703
Shawn Dilles (b. 1960) is the Assistant Coordinator for the Publications Section of the Association of Lunar and Planetary Observers (ALPO) and Editor of \{\it The Strolling Astronomer\}, the journal of ALPO. He is also an author and historian living in Virginia.

## (53817) Gertrudebacon $=2000$ EO $_{138}$

Discovery: 2000-03-11 / CSS / Catalina / 703
Gertrude Bacon (1874-1949) was a British aeronautical pioneer. She observed the 1899 Leonid meteor shower from a hot air balloon with her father, Reverend John Bacon. She was an original member of the British Astronomical Association attending the inaugural meeting in 1890, and a member of the British Association for the Advancement of Science.

## (113213) Marcoolmo $=\mathbf{2 0 0 2}$ RM ${ }_{118}$

Discovery: 2002-09-06 / F. Bernardi * / Campo Imperatore / 599
Marco Olmo (b. 1948) is an Italian ultra-marathon runner. Known as "the man who stopped time", he ran several desert marathons around the world. He won the Ultra Trail du Mont Blanc (a 167-km race between France, Italy and Switzerland) in 2006 and 2007. In 2016 he won the Ultra Bolivia Race.
(171424) Rudyfernandez $=2007 \mathrm{NL}_{2}$

Discovery: 2007-07-13 / OAM / La Sagra / J75
Rodolfo 'Rudy' Fernandez Farrs (b. 1985) is a Spanish basketball player for Real Madrid. He is a two-time world champion (2006, 2019), a four-time continental champion (2009, 2011, 2015, 2022), and a triple Olympic runner-up (silver in 2008 and 2012, bronze in 2016). He has played in the NBA for Portland and Denver.

## (181494) Forestale $=\mathbf{2 0 0 6} \mathbf{U J}_{\mathbf{4}}$

Discovery: 2006-10-16 / M.T. Mazzucato, L. Tesi * / San Marcello / 104
Dedicated to the women and men of the Italian State Forestry Corps (1822-2016). It was a civil corps, established by Carlo Felice di Savoia (1765-1831), for the custody and surveillance of the woods. The corps gained its royal license in 1822.

## (247341) Shaulladany $=2001$ UV $_{209}$

Discovery: 2001-10-20 / NEAT / Haleakala / 608
Shaul Paul Ladany (b. 1936) competed as a racewalker for Israel in the 1968 and 1972 Olympics and set the world record for the 50-mile walk in April 1972. He survived the Holocaust and, later, the massacre at the Munich Olympics. In 2007 he was awarded the Pierre de Coubertin Medal and was inducted into the International Jewish Sports Hall of Fame in 2012.
(343413) Lauratoyama $=2010$ CX $_{181}$

Discovery: 2010-02-14 / Pan-STARRS 1 / Haleakala / F51
Laura Toyama (b. 1965) is a Fiscal Support Specialist at the Institute for Astronomy of the University of Hawai‘i. She provides support to Pan-STARRS by facilitating travel and purchases of equipment and supplies for the project, enabling the discovery of NEOs, supernovae and other moving or transient objects.

## (343439) Kaukali $=\mathbf{2 0 1 0}$ DW $_{77}$

Discovery: 2010-02-16 / Pan-STARRS 1 / Haleakala / F51
Chris Kaukali (b. 1969) is a Fiscal Specialist at the University of Hawai'i's Institute for Astronomy. He supports the Pan-STARRS project through careful management to highlight research discoveries of NEOs, along with supernovae, variable stars, and other celestial objects.

## (345959) Dafeng $=2007$ SA $_{23}$

Discovery: 2007-09-21 / PMO NEO Survey Program / XuYi / D29
Dafeng is a coastal district under the administration of Yancheng, Jiangsu province, China. Located on the Jiangsu North Plain with a coastline of 112 km , Dafeng was historically one of the largest salt-making areas in China and now is famed for its well preserved eco-system and numerous national conservation parks.
(346998) Wakamura $=2010$ CR $_{182}$

Discovery: 2010-02-15 / Pan-STARRS 1 / Haleakala / F51
Cori Wakamura (b. 1977) is a Fiscal Specialist at the Institute for Astronomy of the University of Hawai‘i. She provides support to Pan-STARRS by processing procurements necessary for the research project to discover NEAs, comets and other celestial objects.

## (347016) Haydnhuntley $=2010$ DR $_{77}$

Discovery: 2010-02-16 / Pan-STARRS 1 / Haleakala / F51
J. Haydn Huntley (b. 1963) is an American software engineer who earned his MS in Computer Science from Indiana University in 1992. He has worked with the Pan-STARRS team since 2011. Haydn has wide-ranging interests, including inventing and adventuring.

## (353429) Fairlamb $=2011$ QP $_{46}$

Discovery: 2011-06-08 / Pan-STARRS 1 / Haleakala / F51
John R. Fairlamb (b. 1988) is a British astronomer from Newcastle-upon-Tyne. He works as a software specialist at the University of Hawai'i as part of the Pan-STARRS survey where he aids efforts to discover Near-Earth Objects. He graduated with a PhD in astronomy from the University of Leeds, where he studied mass accretion in Herbig Ae/Be stars.

## (353682) Maberry $=2011 \mathbf{U J}_{286}$

Discovery: 2011-06-11 / Pan-STARRS 1 / Haleakala / F51
Michael T. Maberry (b. 1952) was the Assistant Director of the Institute for Astronomy, University of Hawai'i, USA. He was responsible for management of Haleakala Observatories including permitting and construction of Pan-STARRS. He was Co-PI of the Maui High Performance Computing Center, where the early Pan-STARRS Image Processing Pipeline was hosted.

## (353745) Williamunruh $=2011$ YE $_{47}$

Discovery: 2011-10-23 / Pan-STARRS 1 / Haleakala / F51
William Unruh (b. 1967) is the Physical Plant Manager and Safety Officer at the Institute for Astronomy at the University of Hawai'i, where his work includes support for Pan-STARRS. Born in Kansas, he now lives in Hawai'i and his interests are being in and experiencing the outdoors, wildlife and biodiversity.

## (483615) Martinmccarthy $=\mathbf{2 0 0 4}$ SP $_{41}$

Discovery: 2004-09-18 / K. Černis, J. Zdanavičius * / Moletai / 152
Fr. Martin F. McCarthy SJ (1923-2010) was an American astronomer noted for his study of carbon stars. At the Vatican Observatory from 1958-1999, he served as a key figure in the Observatory's transition to the world of modern research. In 1986 he founded the Vatican Observatory Summer Schools in Astrophysics, an initiative which has become world renowned.

## (483636) Treanor $=2004 \mathbf{T J}_{347}$

Discovery: 2004-10-11 / K. Černis, J. Zdanavičius * / Moletai / 152
Fr. Patrick Treanor SJ (1920-1978) was an English astronomer noted for research on polarized light from stars and the interstellar medium. While at Oxford, he won the Johnson Memorial Prize for his doctoral thesis on interference phenomena. He served as director of the Vatican Observatory from 1970 until his death.
(483637) Johanstein $=\mathbf{2 0 0 4} \mathbf{T M}_{347}$

Discovery: 2004-10-12 / K. Cernis, J. Zdanavičius * / Moletai / 152
Johan Stein SJ (1888-1952) was a Dutch astronomer, a student of H. A. Lorentz, noted for his work on variable stars. He served as director of the Vatican Observatory from 1930 until his death. During the war he opened the observatory to 12,000 refugees. Queen Juliana made him a Knight of the Lion of Holland, and a lunar crater is named for him.

## (565139) Sumshchyna $=2017$ BB $_{95}$

Discovery: 2005-12-01 / Mt. Lemmon Survey / Mount Lemmon / G96
Named for the hardworking, talented, and kind citizens of the agricultural and industrial region of Ukraine known as Sumshchyna, Sumy Oblast. Name suggested by V. Sulym of the AstroSumy society, and members of the Ukrainian Street Astronomy asteroid search team: V. Muliavka, O.
Semeshchuk, A. Katkalov, S. Plaksa.

## Recent Comet Namings \& Numberings

Recently-assigned comet names and numbering of periodic comets are listed below. The recently-assigned names list indicates, using an asterisk, any comet whose discovery is eligible for the Edgar Wilson Award, as well as the reference where the name first appears (this may not be the circular announcing the discovery, or the first appearance of a name if the name was modified subsequently). If a date appears as the reference, it refers to the date that a News note of a name change appeared on the WGSBN website. If a name contains accented characters, the approved ASCII-only version of the name is included between [...]: note that any print, PDF or web usage must use the proper accented form. Newly-numbered objects that are being accorded dual status are flagged as such.

## Recent Namings

C/2023 E1 (ATLAS)
P/2023 C2 (ATLAS\}
P/2023 C1 = P/2016 C3 (Jahn)
P/2023 B3 (PANSTARRS)
C/2023 B2 (ATLAS)
P/2023 B1 (PANSTARRS)
C/2023 A3 (Tsuchinshan-ATLAS)
C/2023 A2 (SWAN)
C/2023 A1 (Leonard)
C/2022 Y2 (Lemmon)
C/2022 Y1 (Hogan)
C/2022 W3 (Leonard)
C/2022 W2 (ATLAS)
C/2022 W1 (Rankin)
453P/2022 V1 = P/2010 BN 109 (WISE-Lemmon)
454P/2022 U5 = P/2013 W3 (PANSTARRS)
C/2022 U4 (Bok)
MPEC 2023-E59
MPEC 2023-F141
MPEC 2023-F121
MPEC 2023-D10
MPEC 2023-C44
MPEC 2023-B118
MPEC 2023-D77
MPEC 2023-D49
MPEC 2023-B66
MPEC 2023-B225
MPEC 2023-A37
MPEC 2023-A29
MPEC 2023-A28
MPEC 2022-W159
MPEC 2022-W148
MPEC 2022-W234
MPEC 2022-W158
C/2022 U3 (Bok)
C/2022 U2 (ATLAS)
C/2022 U1 (Leonard)
C/2022 T1 (Lemmon)
C/2022 S5 (PANSTARRS)
C/2022 S4 (Lemmon)
C/2022 S3 (PANSTARRS)
P/2022 S1 (PANSTARRS)
C/2022 R6 (PANSTARRS)
MPEC 2022-V83
MPEC 2022-V66
MPEC 2022-U343
MPEC 2023-C52
MPEC 2022-V2
MPEC 2022-U170
MPEC 2022-T122
MPEC 2022-T89
MPEC 2022-V1

P/2022 R5 (PANSTARRS)
P/2022 R4 (PANSTARRS)
P/2022 R3 (Leonard)
P/2022 R2 (ATLAS)
P/2022 R1 (PANSTARRS)
$\mathrm{C} / 2022 \mathrm{QE}_{78}$ (ATLAS)
P/2022 Q2 (ATLAS)
C/2022 P3 (ZTF)
P/2022 P2 (ZTF)
C/2022 P1 (NEOWISE)
$\mathrm{C} / 2022 \mathrm{O} 2$ (PANSTARRS)
C/2022 O1 (ATLAS)
P/2022 M1 (LONEOS-PANSTARRS)
447P/2021 R9 (Sheppard-Tholen)
$\mathrm{P} / 2021 \mathrm{PE}_{20}$ (ATLAS)
$\mathrm{P} / 2020 \mathrm{MK}_{4}$ (PANSTARRS)
P/2020 A4 (PANSTARRS-Lemmon)
C/2019 G4 (PANSTARRS)
C/2018 S3 (TESS)
C/2018 T2 (TESS)
$452 \mathrm{P} / 2003 \mathrm{CC}_{22}=\mathrm{P} / 2022 \mathrm{~B} 5$ (Sheppard-Jewitt)
$\mathrm{P} / 2010 \mathrm{VH}_{95}$ (Catalina)
C/1971 M1 (Edwards)
C/1951 G1 (Groeneveld)

MPEC 2022-T88
MPEC 2022-T87
MPEC 2022-S250
MPEC 2022-S87
MPEC 2022-R124
MPEC 2022-U218
MPEC 2022-R123
MPEC 2022-R132
MPEC 2022-Q201
MPEC 2022-Q3
MPEC 2022-Q25
MPEC 2022-Q2
2022-09-03
MPEC 2022-O19
MPEC 2023-C66
MPEC 2022-W78
MPEC 2022-P91
MPEC 2022-P69
MPEC 2023-D54
MPEC 2022-Q126
MPEC 2022-V36
MPEC 2023-F167
MPEC 2023-F148
MPEC 2023-F18

## Recent Numberings

456P/2021 L4 = P/2012 Q3 (PANSTARRS) MPC 160359
$455 \mathrm{P} / 2017 \mathrm{~S} 9=\mathrm{P} / 2011 \mathrm{Q} 5=\mathrm{P} / 2022 \mathrm{R} 7$ (PANSTARRS) MPC 160359
454P/2022 U5 = P/2013 W3 (PANSTARRS) MPC 160359
$453 \mathrm{P} / 2022 \mathrm{~V} 1=\mathrm{P} / 2010 \mathrm{BN}_{109}$ (WISE-Lemmon) MPC 160359
$452 \mathrm{P} / 2003 \mathrm{CC}_{22}=\mathrm{P} / 2022 \mathrm{~B} 5$ (Sheppard-Jewitt) MPC 158523
451P/2007 A $2=\mathrm{P} / 2006 \mathrm{WY}_{182}=\mathrm{P} / 2022$ S2 (Christensen) MPC 158523
$450 \mathrm{P} / 2004 \mathrm{~A} 1=\mathrm{P} / 2022 \mathrm{Q} 3$ (LONEOS) MPC 158523
449P/2020 S6 = P/1987 A2 = P/2013 Y3 (Leonard)
MPC 158523
448P/2015 X1 = P/2022 Q1 = P/2008 T13 (PANSTARRS) MPC 141922
447P/2021 R9 = P/2008 T14 (Sheppard-Tholen)
446P/2012 O3 = P/2022 G2 (McNaught)
MPC 141922
MPC 141173
445P/2014 R5 = P/1998 W9 = P/2006 S14 = P/2022 L5 (Lemmon-PANSTARRS)
MPC 141173
444P/2016 $\mathrm{PM}_{1}=\mathrm{P} / 2010 \mathrm{LK}_{36}=\mathrm{P} / 2016 \mathrm{MD}=\mathrm{P} / 2022 \mathrm{C} 4$ (WISE-PANSTARRS)
MPC 141173

## Standard Acronyms \& Abbreviations

The standard acronyms that may be used in citations without needing to be expanded are listed at:
https://www.wgsbn-iau.org/documentation/AcronymsAndAbbreviations.html.

## Statistics \& Links

There are currently 23945 named minor planets.
Discoverers of minor planets may submit name proposals via the WGSBN voting website at: https://minorplanetcenter.net/submit_name/login
Registration is required to access this site. Requests for access should be made to contact@wgsbn-iau.org.

Work on a new voting website is underway.
Archival copies of the Bulletin, as well as machine-readable datafiles of new names, citations and corrigenda from each issue, are available on the WGSBN website:
https://www.wgsbn-iau.org/
The Bulletin is also available from the Publications section of the IAU website:
https://www.iau.org/publications/iau/wgsbn-bulletins/
The email address for the WGSBN is contact@wgsbn-iau.org.

## WGSBN Members

There are 15 members of the WGSBN, 11 of whom are voting members. The other four members, who are ex-officio, are the President and General Secretary of the IAU, and representatives for the IAU WG Planetary System Nomenclature and the IAU Minor Planet Center.

The current members of the WGSBN are listed below:

- Jana Tichá, Chair
- Keith Noll, Vice-Chair
- Gareth Williams, Secretary
- Yuliya Chernetenko
- Julio Fernández
- Daniel Green
- Pam Kilmartin
- Syuichi Nakano
- Carrie Nugent
- Don Yeomans
- Jin Zhu
- Debra M. Elmgreen, ex-officio (IAU President)
- José Miguel Rodriguez Espinosa, ex-officio (IAU General Secretary)
- Rita Schulz, ex-officio (WGPSN)
- Peter Vereš, ex-officio (MPC)

The WGSBN is a functional Working Group of the IAU, under the Executive Committee.

