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978-0-521-76263-2 — Massive Stars

Mario Livio, Eva Villaver

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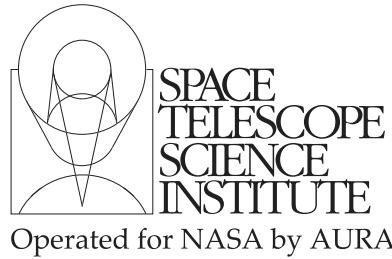
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MASSIVE STARS: FROM POP III AND GRBs TO THE MILKY WAY

This volume is based on a meeting held at the Space Telescope Science Institute on May 8–11, 2006.

This collection of review papers, written by world experts in the many aspects of massive stars, provides an invaluable resource, both to professional astronomers and astrophysicists, and for students. The topics covered range from the formation of massive stars, to their role in the early universe, and from stellar winds to pair-production supernovae.



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held in Baltimore, Maryland
May 8–11, 2006

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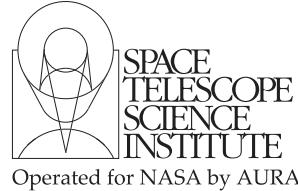
MARIO LIVIO

Space Telescope Science Institute, Baltimore, MD 21218, USA

EVA VILLAYER

Space Telescope Science Institute, Baltimore, MD 21218, USA

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Shaftesbury Road, Cambridge CB2 8EA, United Kingdom

One Liberty Plaza, 20th Floor, New York, NY 10006, USA

477 Williamstown Road, Port Melbourne, VIC 3207, Australia

314–321, 3rd Floor, Plot 3, Splendor Forum, Jasola District Centre, New Delhi – 110025, India

103 Penang Road, #05–06/07, Visioncrest Commercial, Singapore 238467

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Participants

Aloisi, Alessandra	Space Telescope Science Institute/ESA
Attard, Michael	University of Western Ontario
Balsara, Dinshaw	University of Notre Dame
Beckwith, Steven	Space Telescope Science Institute
Belczynski, Chris	New Mexico State University
Blair, William	The Johns Hopkins University
Bonanos, Alceste	Carnegie Institution of Washington
Bonnell, Ian	University of St. Andrews
Bromm, Volker	University of Texas
Chen, Hsiao-Wen	University of Chicago
Chevalier, Roger	University of Virginia
Crowther, Paul	University of Sheffield
Dessart, Luc	Steward Observatory
Disney, Mike	Cardiff University
Duncan, Douglas	University of Colorado
Edwards, Michelle	University of Florida
Eldridge, John	Queen's University Belfast
Elmegreen, Bruce	IBM Watson Research Center
Fabbiano, Giuseppina	Harvard-Smithsonian Center for Astrophysics
Figer, Donald	Rochester Institute of Technology
Fox, Derek	The Pennsylvania State University
Fruchter, Andrew	Space Telescope Science Institute
Galliano, Frédéric	NRC/NPP, NASA Goddard Space Flight Center
Garcia, Miriam	Instituto de Astrofísica de Canarias
Gardner, Jonathan P.	NASA Goddard Space Flight Center
Gehrels, Neil	NASA Goddard Space Flight Center
Godon, Patrick	Villanova University
Gouliermis, Dimitrios	Max-Planck Institute for Astronomy
Gull, Theodore	NASA Goddard Space Flight Center/EUD/EP&SA
Hasan, Hashima	NASA Headquarters
Hauser, Michael	Space Telescope Science Institute
Hillier, D. John	University of Pittsburgh
Hunter, Ian	Queen's University Belfast
Johnson, Kelsey	University of Virginia
Kashlinsky, Alexander Sasha	NASA Goddard Space Flight Center
Kaspi, Victoria	McGill University
Koekemoer, Anton	Space Telescope Science Institute
Kratter, Kaitlin	University of Toronto
Krumholz, Mark	Princeton University
Kudritzki, Rolf	Institute for Astronomy, University of Hawaii
Langer, Norbert	Utrecht University
Lawlor, Timothy	The Pennsylvania State University, Wilkes-Barre
Leistra, Andrea	University of Arizona
Leitherer, Claus	Space Telescope Science Institute
Lennon, Daniel	The Isaac Newton Group of Telescopes
Livio, Mario	Space Telescope Science Institute
Loeb, Abraham	Harvard University

Participants

Lopez Merino, Antonio	Niels Bohr Institute, University of Copenhagen
Margon, Bruce	Space Telescope Science Institute
Meixner, Margaret	Space Telescope Science Institute
Mikles, Valerie	University of Florida
Mirabel, Felix	European Southern Observatory, Chile
Mitalas, Romas	University of Western Ontario
Mountain, Matt	Space Telescope Science Institute
Muñoz-Marín, Victor Manuel	Instituto de Astrofísica de Andalucía (IAA-CSIC)
Nazé, Yaël	Institut d'Astrophysique et de Géophysique (ULg)
Nordlund, Aake	JILA, University of Colorado
Norman, Michael	University of California, San Diego
O'Shea, Brian	Los Alamos National Lab
Oey, Sally	University of Michigan
Patel, Nimesh	Harvard-Smithsonian Center for Astrophysics
Pellerin, Anne	Space Telescope Science Institute
Puzia, Thomas H.	Space Telescope Science Institute
Robberto, Massimo	Space Telescope Science Institute
Rothberg, Barry	Space Telescope Science Institute
Sahu, Kailash	Space Telescope Science Institute
Scannapieco, Evan	Kavli Institute for Theoretical Physics
Schaerer, Daniel	Geneva Observatory
Scowen, Paul	Arizona State University
Smartt, Stephen	Queen's University Belfast
Smith, Nathan	University of Colorado
Smith, Britton	The Pennsylvania State University
Sonneborn, George	NASA Goddard Space Flight Center
Sota, Alfredo	Space Telescope Science Institute
Tej, Anandmayee	Tata Institute of Fundamental Research
Tilley, David	University of Notre Dame
Tominaga, Nozomu	University of Tokyo
Townsley, Leisa	The Pennsylvania State University
Tumlinson, Jason	Yale University
Villaver, Eva	Space Telescope Science Institute
Walborn, Nolan	Space Telescope Science Institute
Whalen, Daniel	Los Alamos National Lab
Whitmore, Brad	Space Telescope Science Institute
Whitney, Barbara	Space Science Institute, Boulder
Wiseman, Jennifer	NASA Headquarters
Yao, Lihong	University of Toronto
Young, David	Queen's University Belfast
Young, Teresa	Amateur Astronomer
Young, Timothy	University of North Dakota
Zinnecker, Hans	Astrophysikalisches Institut Potsdam
van der Kruit, Colly	Kapteyn Astronomical Institute
van der Kruit, Pieter	Kapteyn Astronomical Institute

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Preface

The Space Telescope Science Institute Symposium on *Massive Stars: From Pop III and GRBs to the Milky Way* took place during May 8–11, 2006.

These proceedings represent only a part of the invited talks that were presented at the symposium. We thank the contributing authors for preparing their manuscripts.

Traditionally, massive stars played the important roles of being responsible for supernova explosions, of being the progenitors of stellar-mass black holes, and of producing heavy elements. In recent years, massive stars have gained additional importance in our understanding of cosmic history. Very massive stars (Population III) are now recognized as constituting the first population of stars in the universe, and massive stars have been identified as being the progenitors of the long-duration Gamma-ray Bursters. In addition, very massive stars may produce supernova explosions by a new mechanism—pair instability—that has been anticipated theoretically, but has never been unambiguously detected (the recent SN 2006gy may have been such an event).

The ST ScI symposium on Massive Stars attempted to capture all the aspects involved in the astrophysics of massive stars.

We thank Sharon Toolan of ST ScI for her help in preparing this volume for publication.

Mario Livio

Eva Villaver

*Space Telescope Science Institute
Baltimore, Maryland*