What impact do massive stellar associations have on their environment through the power of their ionising radiation and mechanical energy? Gathered together in this volume are papers presented at the first IAC–RGO meeting, held in Puerto Naos La Palma, Spain, dedicated to exploring all aspects of this burning question.

This volume examines the formation and evolution of new clusters of stars, and explores all the possible consequences in a wide variety of objects where massive stellar bursts have occurred. Thus it presents an alternative model to that of supermassive black holes as the power houses of active galactic nuclei; it analyses the impact of Wolf-Rayet stars, stellar winds and supernovae on their host galaxy; and it provides evidence of massive superassociations and of supersonic velocity dispersions which result from photo-ionisation by violent star formation.

For graduate students and researchers, this volume provides a valuable overview and a timely update on all aspects of violent star formation in a host of objects – from 30 Doradus, the largest HII region in the Large Magellanic Cloud, to nuclear starbusts and QSOs.

Violent Star Formation

From 30 Doradus to QSOs

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Proceedings of the first IAC–RGO meeting,
held in Puerto Naos La Palma, Spain
November 8–12, 1993

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CAMBRIDGE
UNIVERSITY PRESS

Published by the Press Syndicate of the University of Cambridge
The Pitt Building, Trumpington Street, Cambridge CB2 1RP
40 West 20th Street, New York, NY 10011–4211, USA
10 Stamford Road, Oakleigh, Melbourne 3166, Australia

First published 1994

Printed in Great Britain at the University Press, Cambridge

A catalogue record of this book is available from the British Library

Library of Congress cataloguing in publication data available

ISBN 0 521 47277 6 hardback

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EDITOR'S PREFACE

Violent Star Formation from 30 Doradus to QSOs was the most recent international conference organized jointly by the Instituto de Astrofísica de Canarias (IAC) and the Royal Greenwich Observatory (RGO). The meeting took place in Puerto Naos, La Palma (Canary Islands, Spain), in November 1993.

This volume contains most of the invited talks and papers presented at the conference. It deals with observations, analysis and theory of violent star formation in its full dimension: from giant HII regions, dwarf and HII galaxies, to starburst galaxies, *IRAS* ultraluminous galaxies and interacting pairs, all the way up to violent star formation in active galactic nuclei and QSOs. Several critical reviews look at the implications of violent star formation from a variety of angles: ionization structure, interaction with the ISM, hydrodynamics, triggering mechanisms, chemical evolution, luminosity functions and the starburst model for AGNs.

On behalf of the organizing committee I would like to thank all the staff and colleagues at the IAC and the RGO who contributed to the organization of the meeting. We are particularly grateful to Monica Murphy (IAC), Judith de Araoz (IAC), Silvia Figueroa (RGO-La Palma) and Rachel Miles (RGO-La Palma) for their efficiency and their keen collaboration to warrant a very pleasant and successful conference. I also want to express my gratitude to Terence Mahoney for his help with the preparation of each of the papers in this volume.

The Local Organization was eased by the definite commitment from the Local Government through their Cabildo Insular de La Palma, and the Cabildo Insular de Santa Cruz de Tenerife. It is a pleasure to acknowledge sponsorship from "SOL Hoteles" and the "Grupo SOL", and the local savings bank "Caja General de Ahorros de Canarias", as well as the generous financial support from the Spanish General Directorate for Scientific and Technical Research (DGICYT) and the International Science Foundation (ISF) without which the celebration of the meeting and the attendance of many young colleagues would have been impossible.

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