

**EXPLODING STARS
AND
INVISIBLE PLANETS**

**EXPLODING
STARS
AND
INVISIBLE
PLANETS**

**THE SCIENCE OF WHAT'S
OUT THERE**



**FRED
WATSON**

Columbia University Press
New York



Columbia University Press
Publishers Since 1893
New York Chichester, West Sussex
cup.columbia.edu

First published in Australia by NewSouth,
an imprint of UNSW Press Ltd.
Copyright © 2019 Fred Watson
All rights reserved

Library of Congress Cataloging-in-Publication Data

Names: Watson, Fred, 1944– author.
Title: Exploding stars and invisible planets: the science of what's out there / Fred Watson.
Description: New York: Columbia University Press, [2019] | Includes index.
Identifiers: LCCN 2019025491 (print) | LCCN 2019025492 (e-book) | ISBN 9780231195409
(cloth) | ISBN 9780231540056 (e-book)
Subjects: LCSH: Astronomy--Popular works.
Classification: LCC QB44.3.W378 2019 (print) | LCC QB44.3 (e-book) | DDC 520--dc23
LC record available at <https://lcn.loc.gov/2019025491>
LC e-book record available at <https://lcn.loc.gov/2019025492>



Columbia University Press books are printed on permanent and durable acid-free paper.
Printed in the United States of America

Design: Josephine Pajor-Markus
Cover design: Julia Kushnirsky
Cover image: Swirls of dust illuminated by light echoes from variable star V838 Monocerotis.
Courtesy of NASA, ESA, and H. Bond (STScI).