

SUB Göttingen  
213 557 657

7

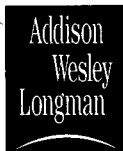


2001 A 10632

# *On the Cosmic Horizon*

Ten Great Mysteries for Third Millennium Astronomy

Jeffrey Bennett



# Contents

*Preface* vii

INTRODUCTION: The Mysteries Ahead	1
MYSTERY 10: Is There Life Elsewhere in Our Solar System?	9
MYSTERY 9: Where Are the Sun's Neutrinos?	23
MYSTERY 8: What Does the Universe Look Like?	37
MYSTERY 7: How Do Galaxies Evolve?	59
MYSTERY 6: Are Earth-like Planets Common?	79
MYSTERY 5: What Makes Gamma-Ray Bursts?	99
MYSTERY 4: Did the Universe Have a Bout of Inflation?	115
MYSTERY 3: What Is the Fate of the Universe?	135
MYSTERY 2: What Is the Universe Made of?	153
MYSTERY 1: Are We Alone?	169
<i>Epilogue</i>	181
<i>Glossary</i>	185
<i>Appendix: Watching the Mysteries Unfold</i>	191
<i>Acknowledgments</i>	197
<i>Credits</i>	199
<i>Index</i>	201