

Contents

<i>Participants</i>	vii
<i>Preface</i>	xiii
The orbital motion and impact circumstances of Comet Shoemaker-Levy 9	
<i>Paul W. Chodas & Donald K. Yeomans</i>	1
Observational constraints on the composition and nature of Comet D/Shoemaker-Levy 9	
<i>Jacques Crovisier</i>	31
Tidal breakup of the nucleus of Comet Shoemaker-Levy 9	
<i>Zdenek Sekanina</i>	55
Earth-based observations of impact phenomena	
<i>Philip D. Nicholson</i>	81
HST imaging of Jupiter shortly after each impact: Plumes & fresh sites	
<i>Heidi B. Hammel</i>	111
Galileo observations of the impacts	
<i>Clark R. Chapman</i>	121
Models of fragment penetration and fireball evolution	
<i>David A. Crawford</i>	133
Entry and fireball models vs. observations: What have we learned?	
<i>Mordecai-Mark Mac Low</i>	157
Dynamics and chemistry of SL9 plumes	
<i>Kevin Zahnle</i>	183
Chemistry induced by the impacts: Observations	
<i>Emmanuel Lellouch</i>	213
SL9 impact chemistry: Long-term photochemical evolution	
<i>Julianne I. Moses</i>	243
Particulate matter in Jupiter's atmosphere from the impacts of Comet P/Shoemaker-Levy 9	
<i>Robert A. West</i>	269
Jupiter's post-impact atmospheric thermal response	
<i>Barney J. Conrath</i>	293
Growth and dispersion of the Shoemaker-Levy 9 impact features from HST imaging	
<i>Reta F. Beebe</i>	307
Waves from the Shoemaker-Levy 9 impacts	
<i>Andrew P. Ingersoll & Hiroo Kanamori</i>	329
Jovian magnetospheric and auroral effects of the SL9 impacts	
<i>Wing-Huen Ip</i>	347