

**Abstract**

**Preface & Acknowledgments**

**Part I: Introduction**

1. Physical Modelling

2. FDTD Methods

3. Analysis Techniques

**Part II: Resonators**

4. Stiff String

5. Brass

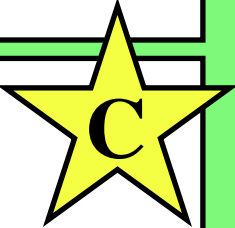
6. 2D Systems

**Part III: Exciters**

7: Physically Inspired

8: Bow

9: Lip Reed



**Part IV: Interactions**

10: Collisions

11: Connections

**Part V: Contributions**

12. Dynamic Grids

13. Real-time

14. Large-Scale

15. Tromba Marina

16. Trombone

**Part VI: 17. Conclusions and Perspectives**

**Part VII: Papers**

**Part VIII: Appendix**