

## ACOUSTICS2008/1499

### Acoustics of Unique Baroque Theatre in Česk'y Krumlov

Jana Dolejsi<sup>a</sup>, Pavel Slavko<sup>b</sup>, Ladislav Pouzar<sup>c</sup> and Monika Rychtarikova<sup>d,e</sup>

<sup>a</sup>Studio D - Akustika s.r.o., Zizkova 12, 371 22 Ceske Budejovice, Czech Republic

<sup>b</sup>Státní hrad a zámek, 381 01 Cesky Krumlov, Czech Republic

<sup>c</sup>Chvalšinská 231, 381 01 Cesky Krumlov, Czech Republic

<sup>d</sup>Lab. ATF, Katholieke Universiteit Leuven, Celestijnenlaan 200D, B-3001 Leuven, Belgium

<sup>e</sup>Dep. of Building Constructions, STU Bratislava, Radlinskeho 11, 81368 Bratislava, Slovakia

The castle theater in the Česk'y Krumlov is a unique historical site in Europe which represents a valuable example of a theater with Baroque scenes from the late 18th century. It was preserved with exceptional completeness and authenticity since it has never burned, and during the last two centuries it was not modernized. The baroque period must be understood as a universal style with many methods of expression which act in harmony, and the individual elements must complement each other and be interconnected to produce an effective unit. It was a challenge to experimentally prove these relationships and connections in as wide context as possible (i.e. relations between the architecture, contemporary scene lighting, perspectives and proportions, roomacoustic properties, contemporary musical interpretations and vocal techniques, placing of the orchestra and other. According to musicians, actors and audience is this theatre known as a hall with excellent acoustic condition. However, no room acoustic measurements were performed in the theatre in the last century. This article report on results from the acoustical measurements and simulation in the main hall of the theatre which help us to understand which acoustical values people find pleasant in the room of this character.