WORKSHOP 'TELLING MATHEMATICS' REVISITED

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The history of mathematics has a strong oral tradition. People tell each other problems and methods, and not so much in classrooms but rather in coffeehouses and during walks and parties. I studied this phenomenon before and reported about it at the European Summer University at Louvain, calling it "Telling mathematics". Interest in these problems continued, as can be seen from the recent book Mathematical Expeditions - Word problems across the ages by Frank Swetz (2012).

I will shed some new light on this culture, of passing mathematical problems and knowledge by sharing it with others. In Louvain my focus was on the role that such problems and especially the act of telling it to fellow students, could have in the classroom. In this presentation I will take a more historical and anthropological point of view. An experiment with two groups of about 40 mathematics teachers each will provide information about the repertoire of professional mathematicians, as far as 'telling mathematics' is concerned. And some of these problems I will trace through history. Many of them originated in Asia, and entered Europe in the Middle Ages and Renaissance. And they continue to be told.

An interesting didactical question arises, which is why this spontaneity of sharing problems with each other is observed rather outside school. What can we, teachers, learn from that?