

T3_92 INTERDISCIPLINARY APPROACH TO PHYSICS TEACHING ENHANCED BY COMPUTER-AIDED MEASUREMENT

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The poster presents different activities aimed at science teaching that are enhanced by computer-aided measurement. They represent an interdisciplinary approach to science teaching presenting experiments on biological phenomena based on physical principle. Students can learn about physical laws or see how these laws also work at different biological processes, such like human respiration. All the presented experiments are enhanced by computer-aided measurement of different physical quantities. These simple experiments involves set of experiments on model of lungs, properties of alveoli, frequency of breathing, how deep in the water you can breathe with the snorkel, how much underpressure or overpressure one can generate with his lungs, how much underpressure one can generate by sucking. Time-based measurement of different physical quantities provides an opportunity to analyse these processes in detail with active students' participation.