



Canadian Association  
of Physicists

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## (I) Active Learning in a Quantum Field Theory Course

*Tuesday 7 June 2022 09:30 (45 minutes)*

Active-learning techniques are as useful for teaching graduate-level quantum field theory (QFT) as they are for introductory physics courses. This talk will describe the speaker's experience using these techniques in a QFT course. Students completed readings and online questions ahead of each class and spent class time working through problems that required them to practice the decisions and skills typical of a theoretical physicist. The instructor monitored these activities and regularly provided timely feedback to guide their thinking. Instructor-student interactions and student enthusiasm were similar to that encountered in one-on-one discussions with advanced graduate students. Course coverage was not compromised. The teaching techniques described here are well suited to other advanced courses.

**Author:** LEPAGE, Peter

**Presenter:** LEPAGE, Peter

**Session Classification:** T1-4 Hot Topics From Theory Made Accessible (DTP) | Sujets chauds de la théorie rendus accessibles (DPT)

**Track Classification:** Symposia Day (Tues. June 7) / Journée de symposiums (mardi, le 7 juin): Symposia Day (DTP) - Hot Topics From Theory Made Accessible