Notes on Quantum Optomechanics for Quantum Optics

Andrey A. Rakhubovsky[1]

[1]*Department of Optics, Palacký University, 17. Listopadu 12, 771 46 Olomouc, Czech Republic* *
(Dated: Sunday 26th November, 2017; Started: November 26, 2017)

The content of lecture of 04/12/2017.
10. (subst. Andrey Rakhubovsky) Quantum optomechanics and electromechanics. Radiation pressure. Capacitive electromechanical coupling. Generic setup. Sideband resolved interactions. Cooling. Membrane-in-middle setup. Pulsed optomechanics. Squeezed mechanical states. Optomechanical entanglement. Quantum transducer.

```
  10. (subst. Andrey Rakhubovsky)
2h 15m
Quantum optomechanics and electromechanics
Radiation pressure
Capacitive electromechanical coupling
Generic setup
Sideband resolved interactions
Cooling
Membrane-in-middle setup
Pulsed optomechanics
Squeezed mechanical states
Optomechanical entanglement
Quantum transducer.
```

* andrey.rakhubovsky@gmail.com