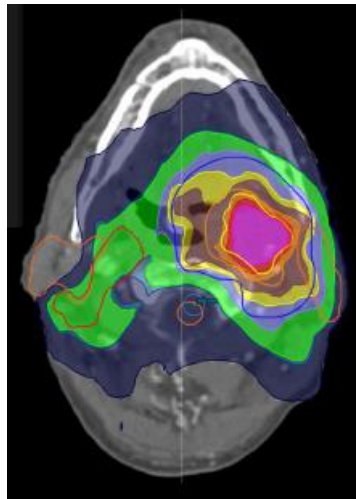
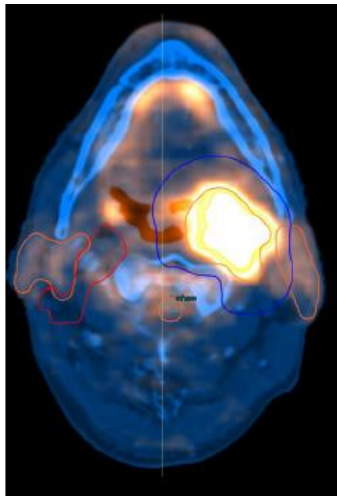
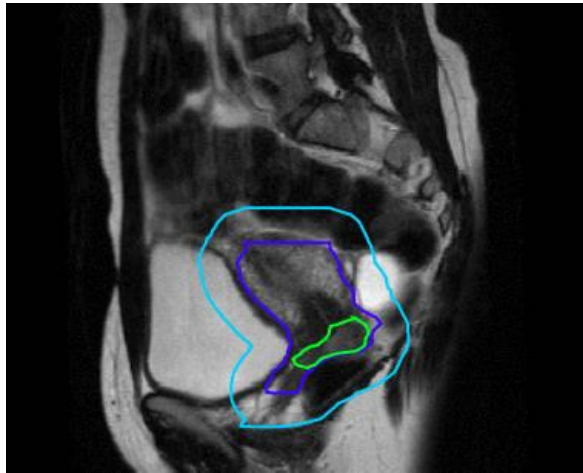


Master thesis, radiotherapy

Taran Paulsen Hellebust, Associate Professor
Ingerid Skjei Knudtsen, Post doc



Consequences of organ motion during radiotherapy

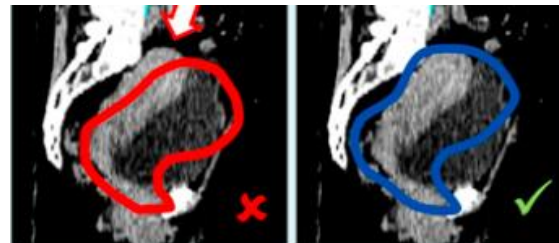
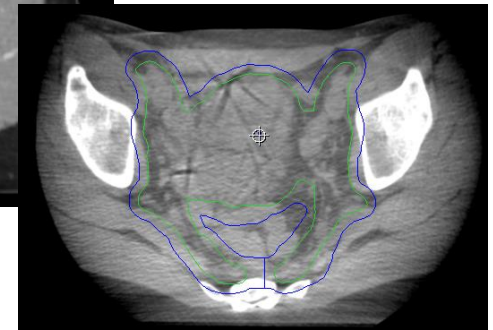


- MRI each week of RT
- Impact of changes in bladder and bowel filling on position changes of uterus

Thanks to Ina Scultz, Utrecht Medical Centre



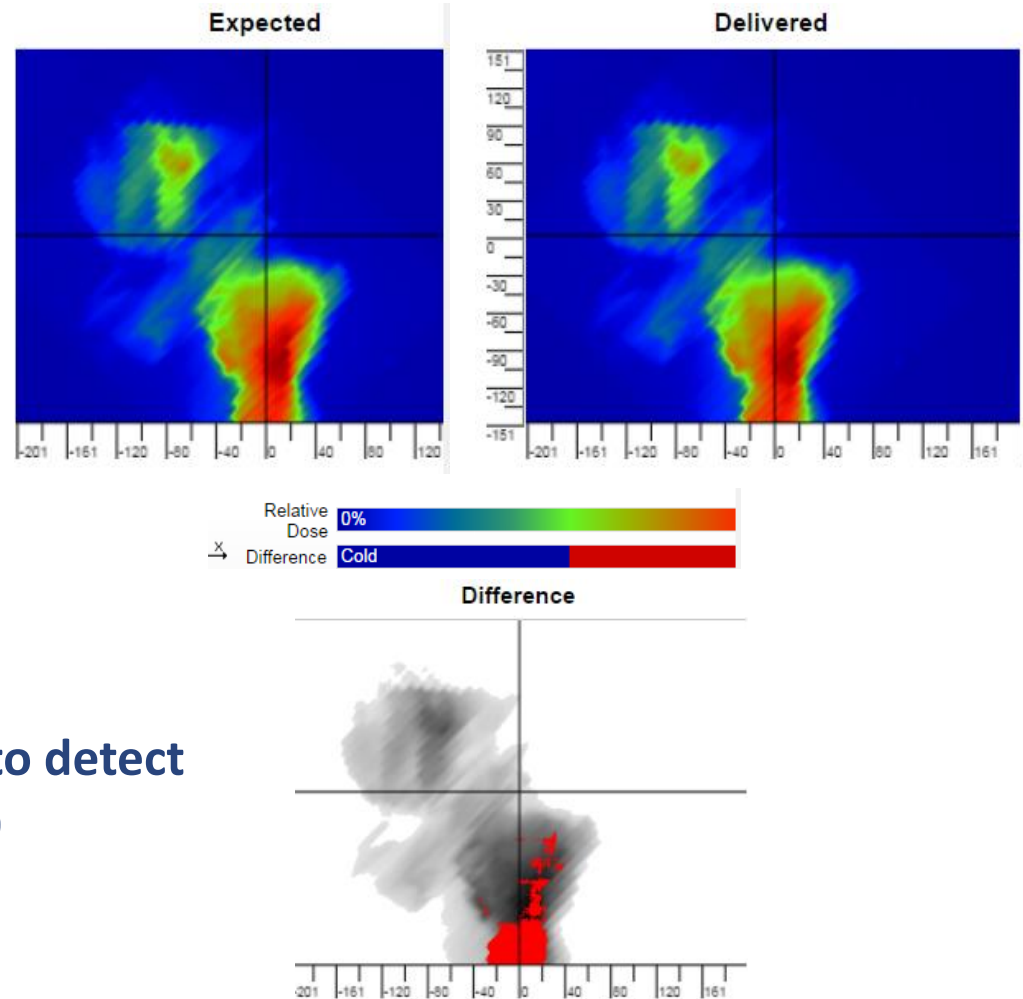
CT for treatment planning



Cone Beam CT (CBCT)

Master thesis: Analyze CBCT-data from 30 patients with cervical cancer

An Automated Exit Patient QA Solution Using EPID

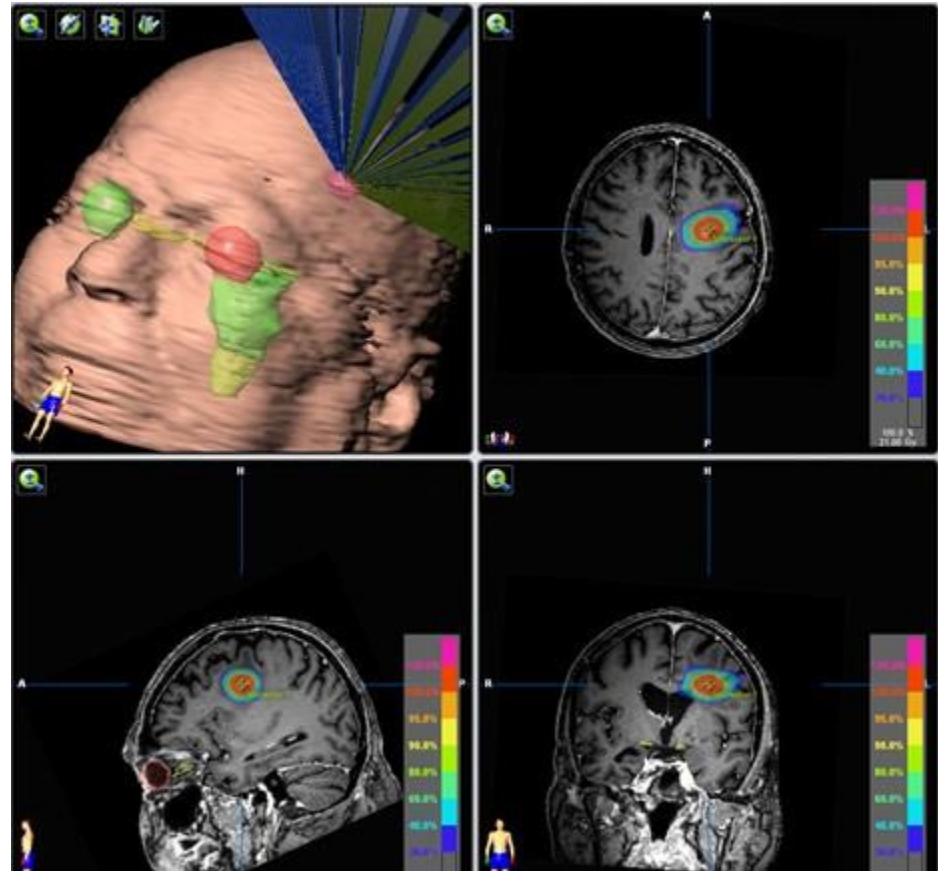


Master thesis:

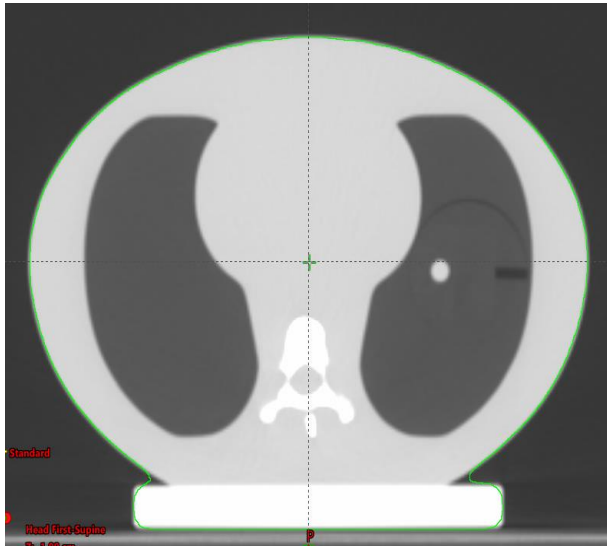
- Analyze what changes are we able to detect (e.g. simulate changes in a phantom)
- Analyze data from many patients

Stereotactic radiotherapy

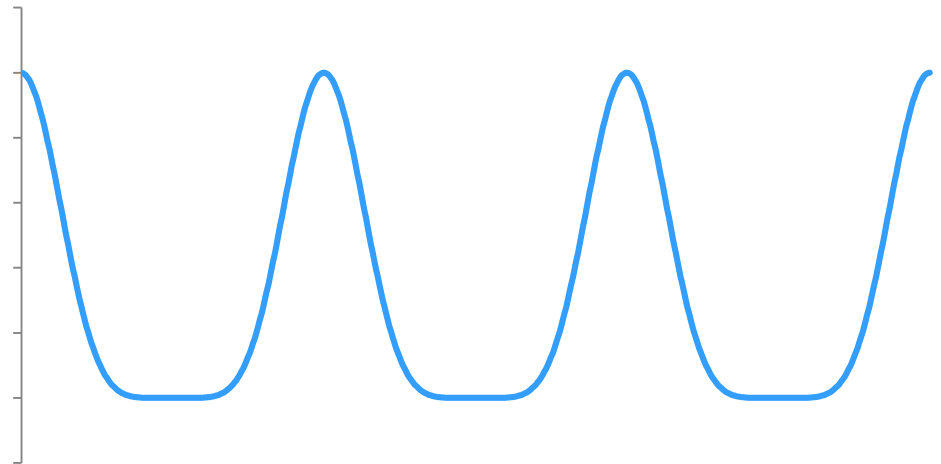
- Until now we use stereotactic radiotherapy for up to four small tumors in the brain
- New features in the treatment planning software
- **Master thesis :**
How can these new features be used to treat more than five tumors?



Firedimensjonal CT for stråleterapi



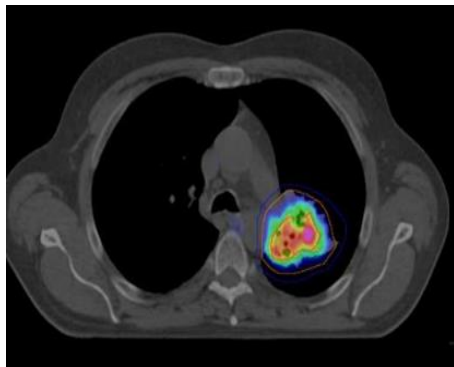
FANTOM MED LUNGETUMOR



RESPIRASJONSKURVE

Masteroppgave: Hvor godt samsvarer den firedimensjonale CT-en med faktisk pustebevegelse? Optimalisering av bildeprotokoll for stråleterapi.

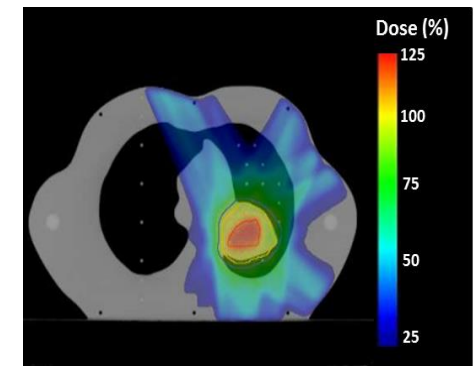
Dosefordeling ved protonterapi



PET/CT-BILDER AV PASIENT



MODELL AV PASIENT
(FANTOM)



STRÅLETERAPIPLAN
(FOTONER)

Masteroppgave:

Hvor sensitiv er dosefordelingen for forflytninger?

Innebærer både beregninger og målinger (Skandionklinikken i Sverige)