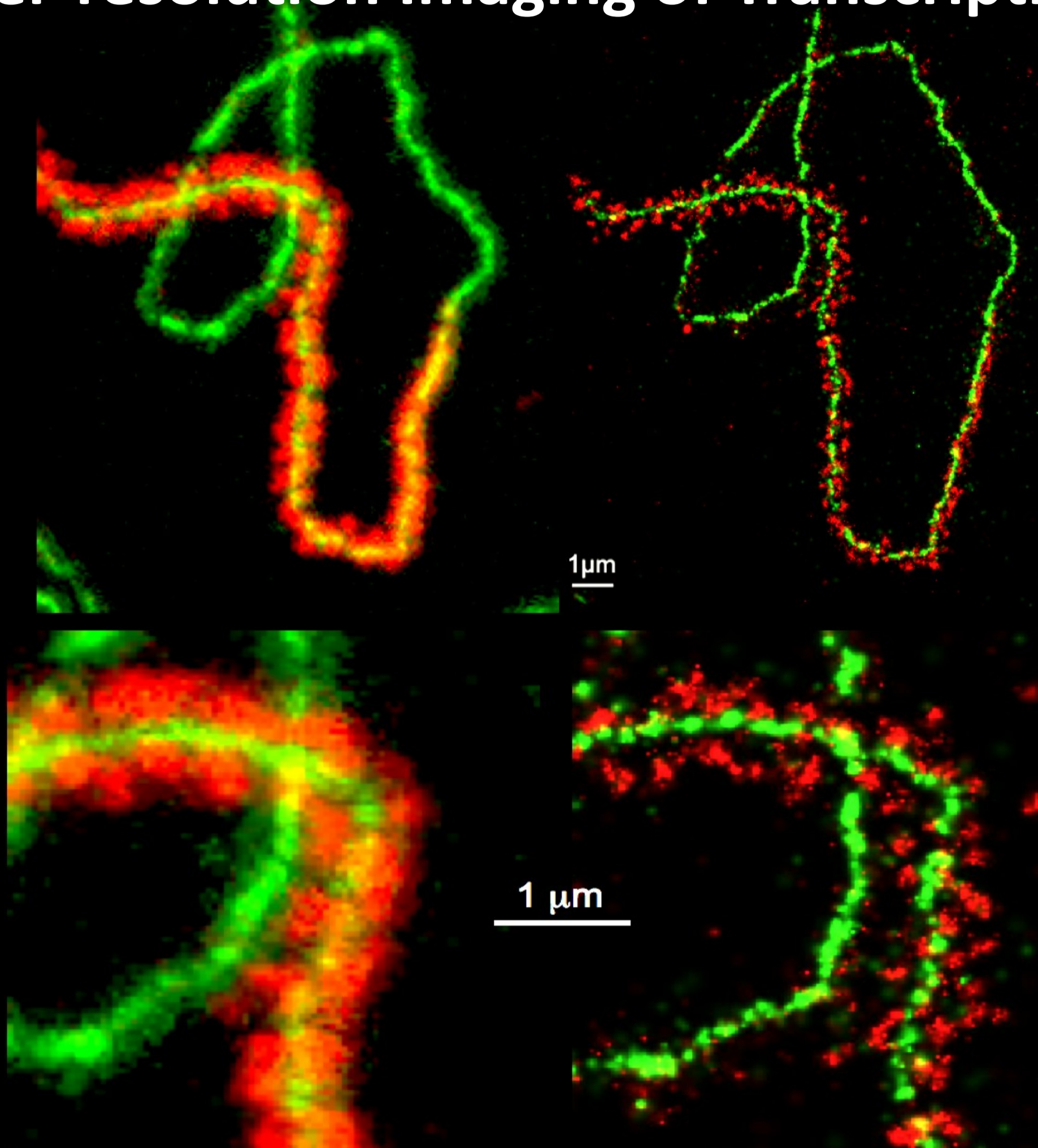


Super-resolution Imaging of Transcription



Left. **Confocal image** of part of a transcription loop from a lampbrush chromosome of the newt *Notophthalmus viridescens*, double stained for RNA polymerase II (green) and an alternative splicing factor CELF1 (red). The DNA axis of the loop is covered along its entire length with polymerase II. By contrast, CELF1 occurs in the ribonucleoprotein matrix surrounding the loop axis, and is limited to a shorter segment of the loop. Resolution of this image is about 200 nm.

Right: The same transcription loop imaged by **super-resolution microscopy** using the spectral precision distance/spectral position determination (SPDM) microscope invented by Christoph Cremer (University of Heidelberg). Image taken by Rainer Kaufmann in Professor.Cremer's laboratory. The resolution of this image is about 40 nm.