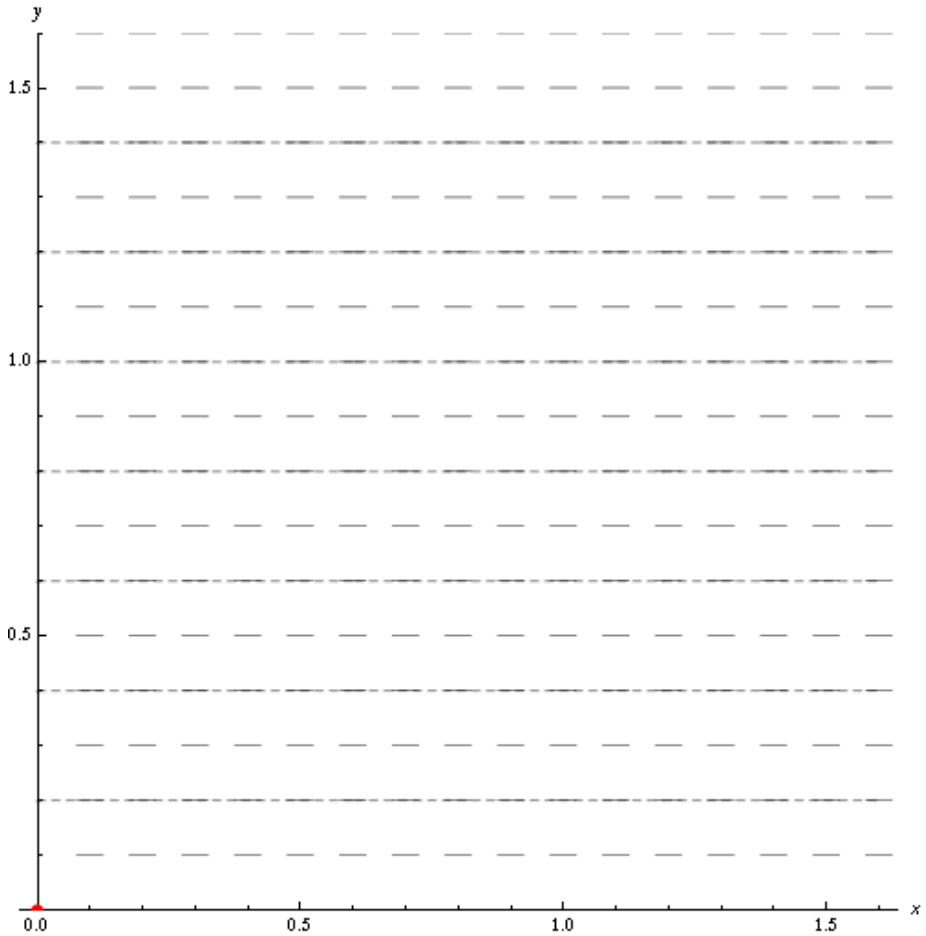
Tobias Bleninger
Universidade Federal do Paraná (UFPR)
Departamento de Engenharia Ambiental(DEA)
www.tobias.br.ms

Tobias Bleninger

MECÂNICA DOS FLUIDOS AMBIENTAL I

Tobias Bleninger
Universidade Federal do Paraná (UFPR)
Departamento de Engenharia Ambiental(DEA)
www.tobias.br.ms

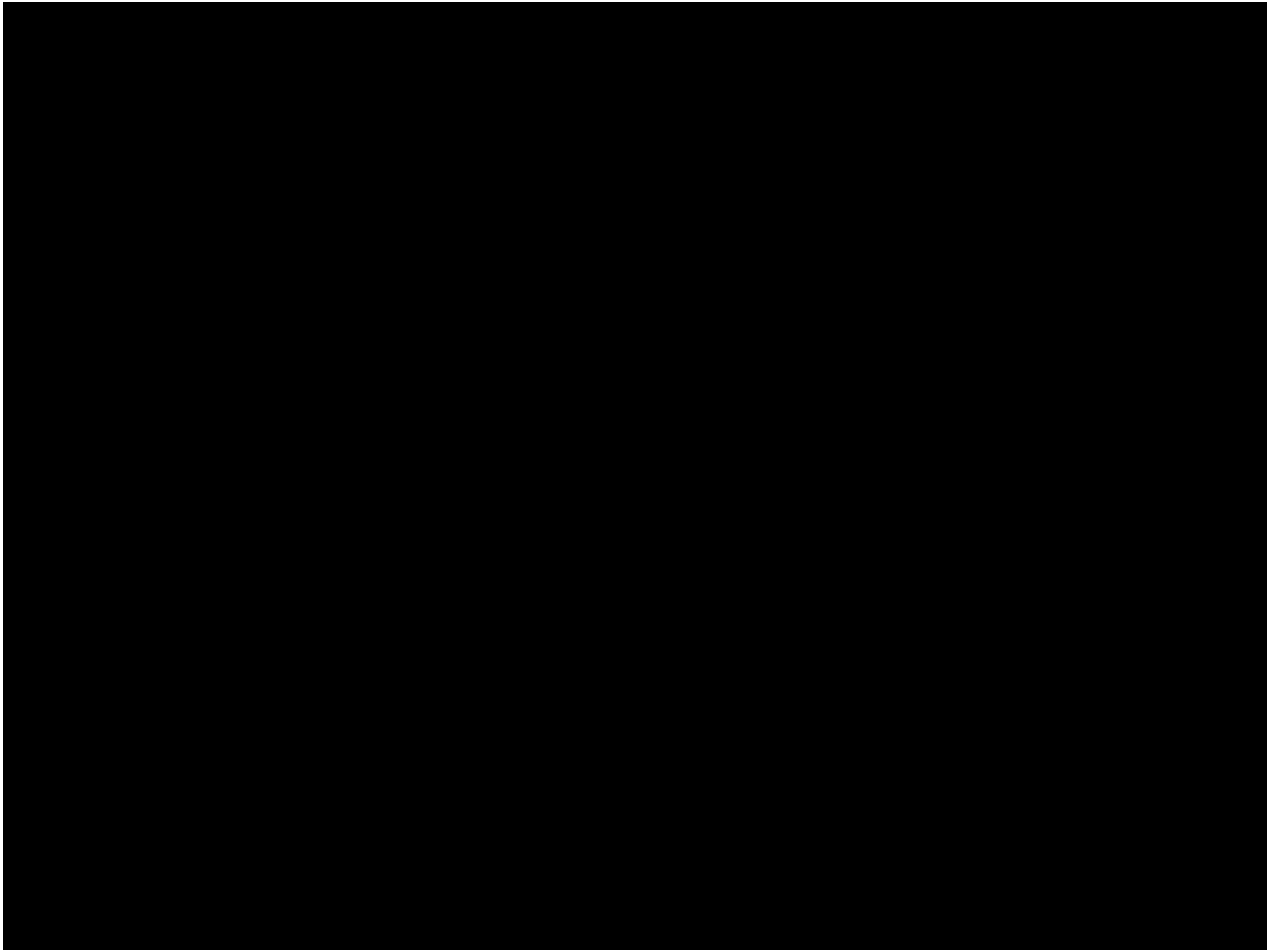
Trajetória, linha de emissão e corrente



The plot shows fluid flow under the velocity field $\mathbf{u}(\mathbf{x}, t) = (1, yt)$. The red dot represents a particle released from the origin at time , tracing out its *pathline (trajetória)* in red. As it moves, it leaves behind a trail of blue ink (released from the origin), which starts on the pathline, but is carried up by the fluid flow (streakline = linha de emissao). The velocity is represented twice, with flow vectors, and the grey dashed *streamlines (linha de corrente)*, which connect the flow vectors.
Fonte: http://en.wikipedia.org/wiki/File:Streaklines_and_pathlines_animation.gif

Trajetória, linha de emissão e corrente

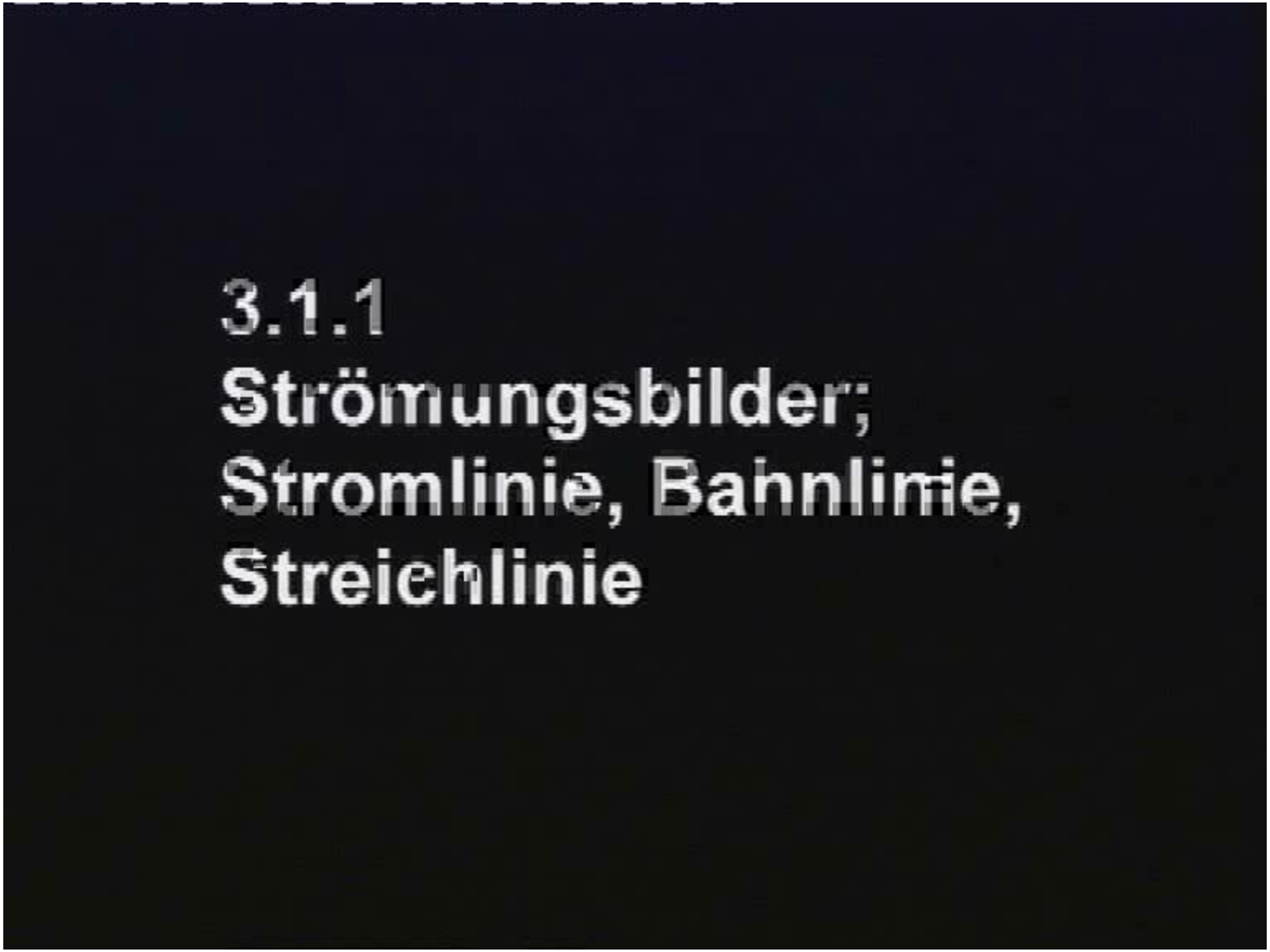
Tobias Bleninger
Universidade Federal do Paraná (UFPR)
Departamento de Engenharia Ambiental(DEA)
www.tobias.br.ms



Pressure Fields and Fluid Acceleration, A.H. Shapiro
http://hydro.ifh.uni-karlsruhe.de/Videos/3_1_Stromlinien.html

Trajetória, linha de emissão e corrente

Tobias Bleninger
Universidade Federal do Paraná (UFPR)
Departamento de Engenharia Ambiental(DEA)
www.tobias.br.ms



silent film loop FM-48 "Flow Visualization", S.J. Kline, NCFMF
http://hydro.ifh.uni-karlsruhe.de/Videos/3_1_1_Stroemungsbilder.html

Trajetória, linha de emissão e corrente

Tobias Bleninger
Universidade Federal do Paraná (UFPR)
Departamento de Engenharia Ambiental(DEA)
www.tobias.br.ms

Fundamental Principals of Flow, Hunter Rouse
http://hydro.ifh.uni-karlsruhe.de/Videos/3_1_1_Koerperumstroemung.html