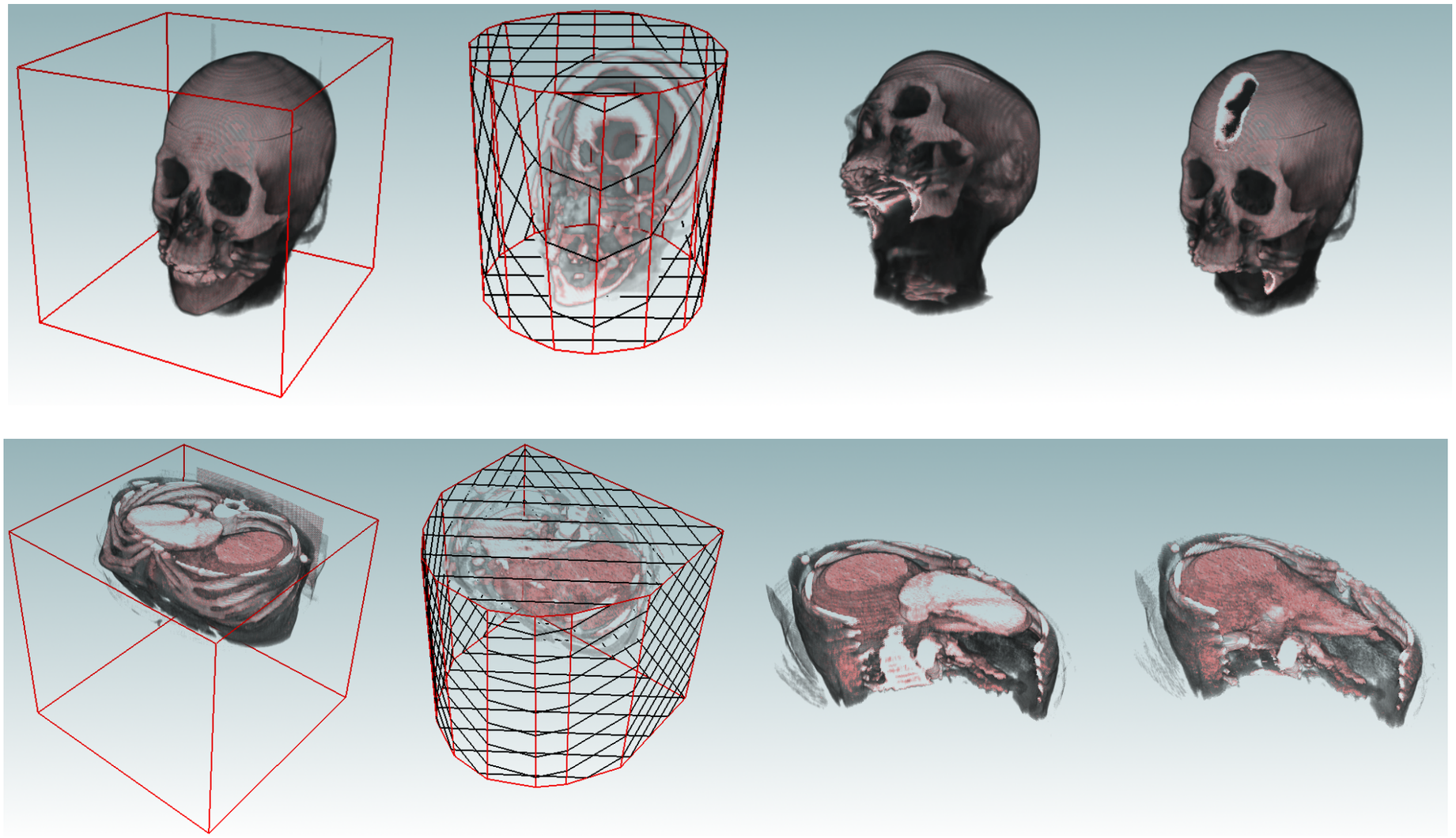
MM – Unidade 01
Realidade Virtual

DSC - Depto. de Sistemas e Computação, FURB
Prof. M.Sc. Dalton S. dos Reis (*dalton@inf.furb.br*)
Prof. Dr. Paulo Cesar Rodacki Gomes (*rodacki@inf.furb.br*)

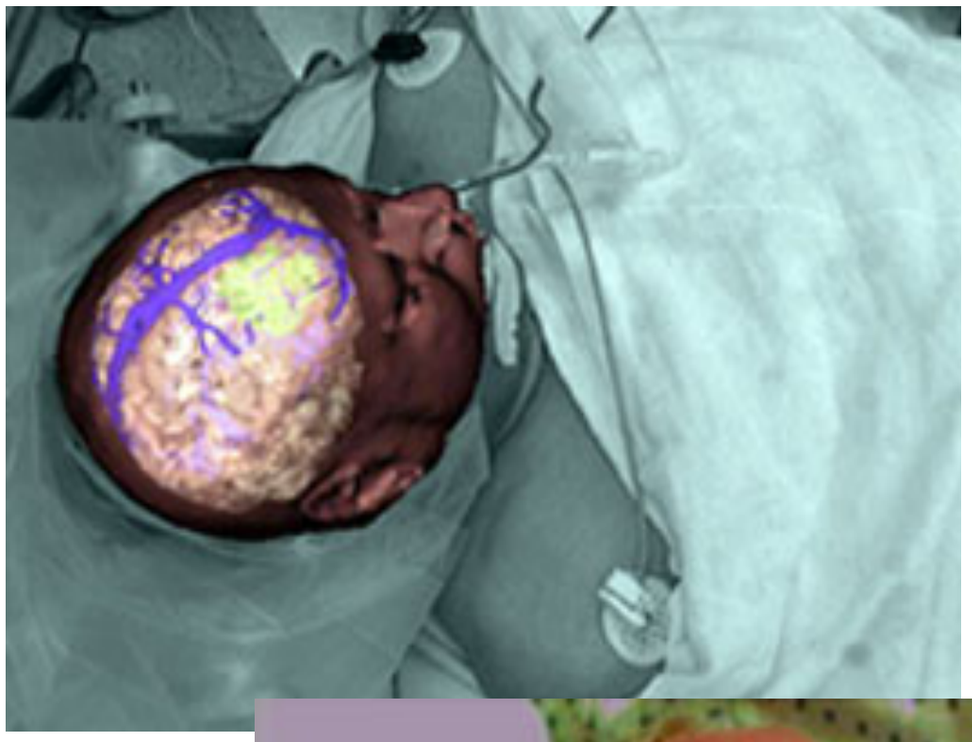
Medicina - interação

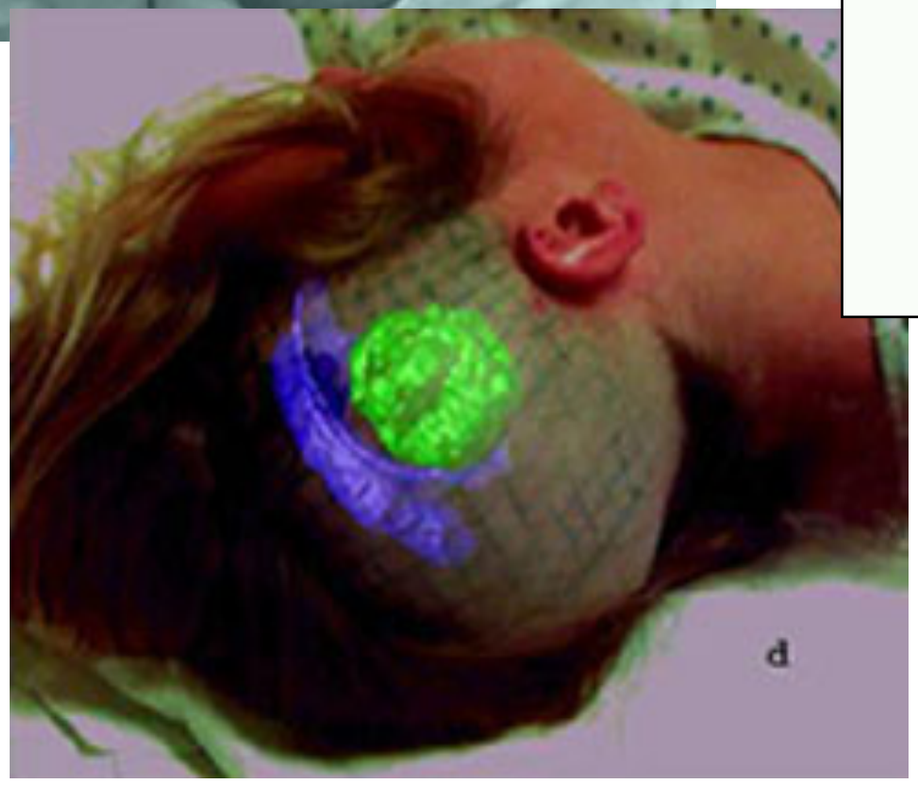
Interação com imagens médicas volumétricas (*Voxels*)

UFRGS – CG
Carla Freitas



Medicina - Realidade Aumentada - RV





Duração: 1:15

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Medicina – Imagens Ultrasom 4D

Exames de ultra-som:
- antigamente: só os pais
- hoje: colorido em 3D (4D)

Duração: 0:14

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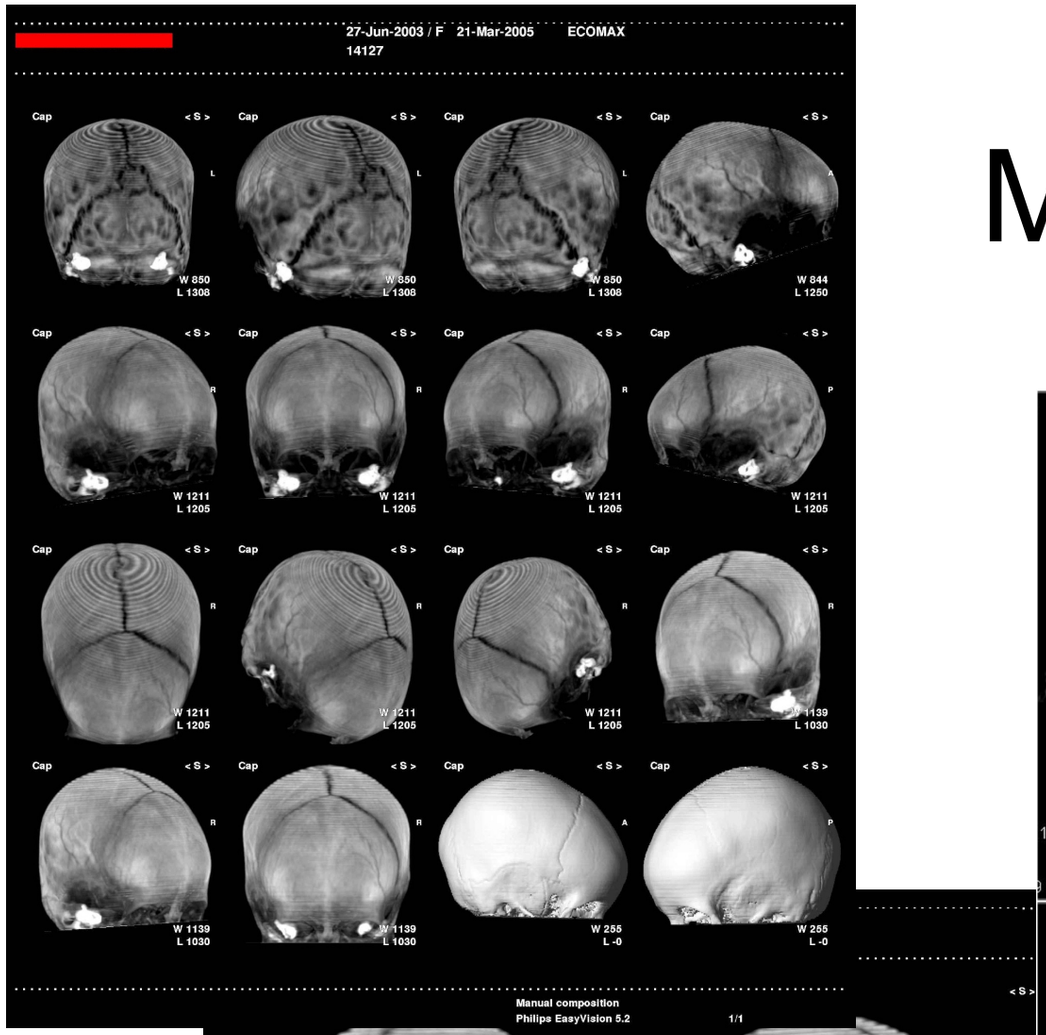
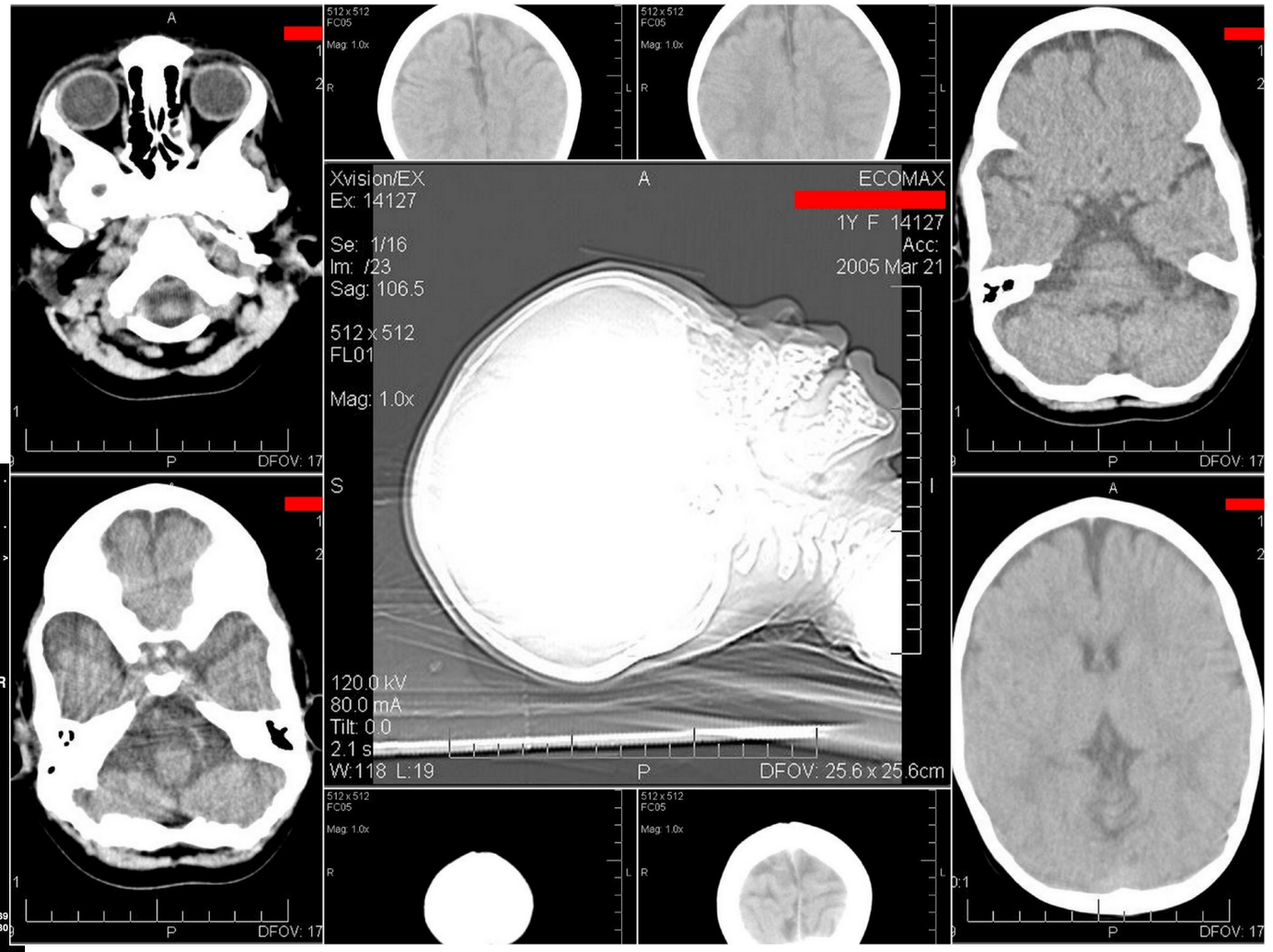
Medicina – Imagens DICOM





DSC/BCC – Multimídia

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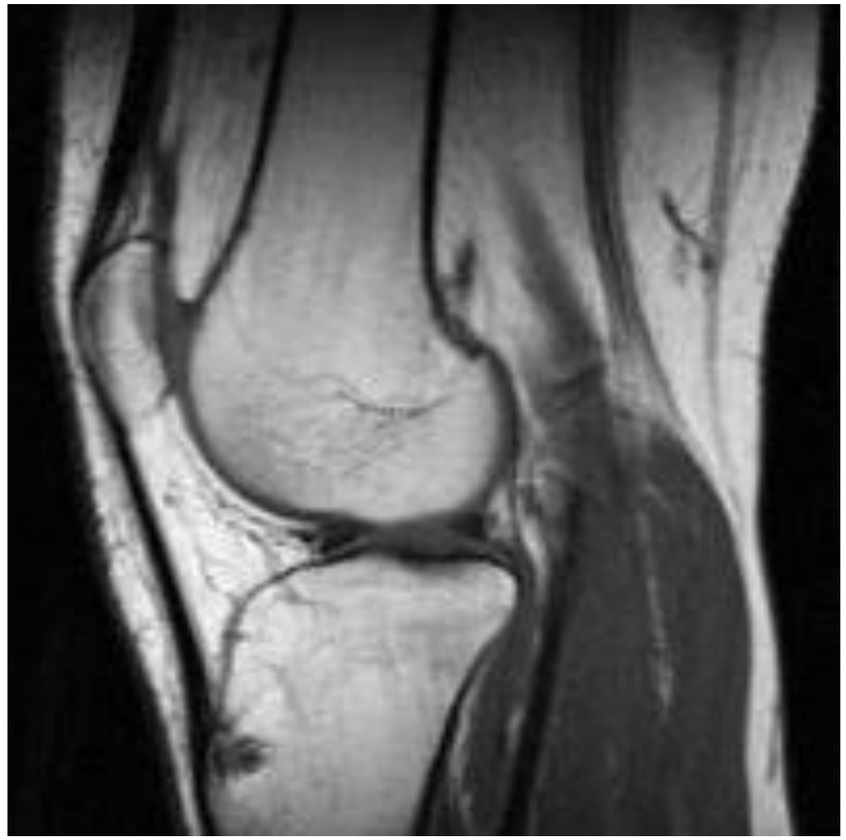
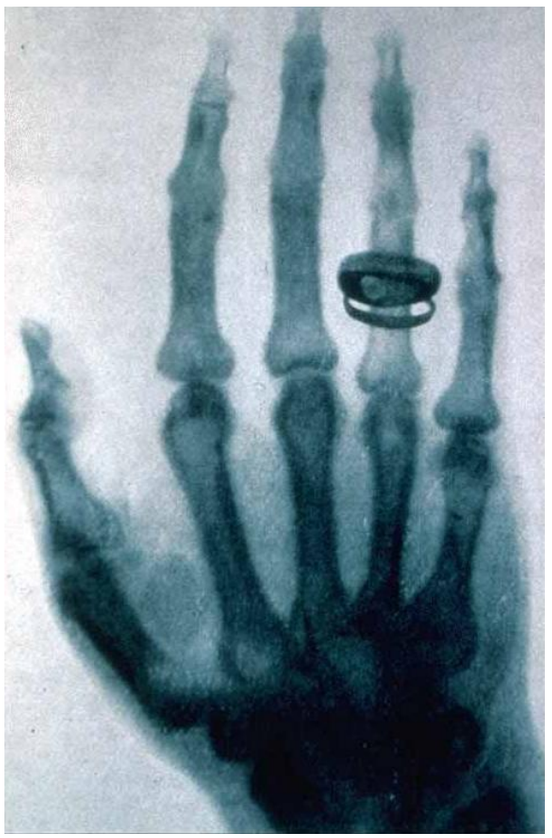
Impressão
do exame





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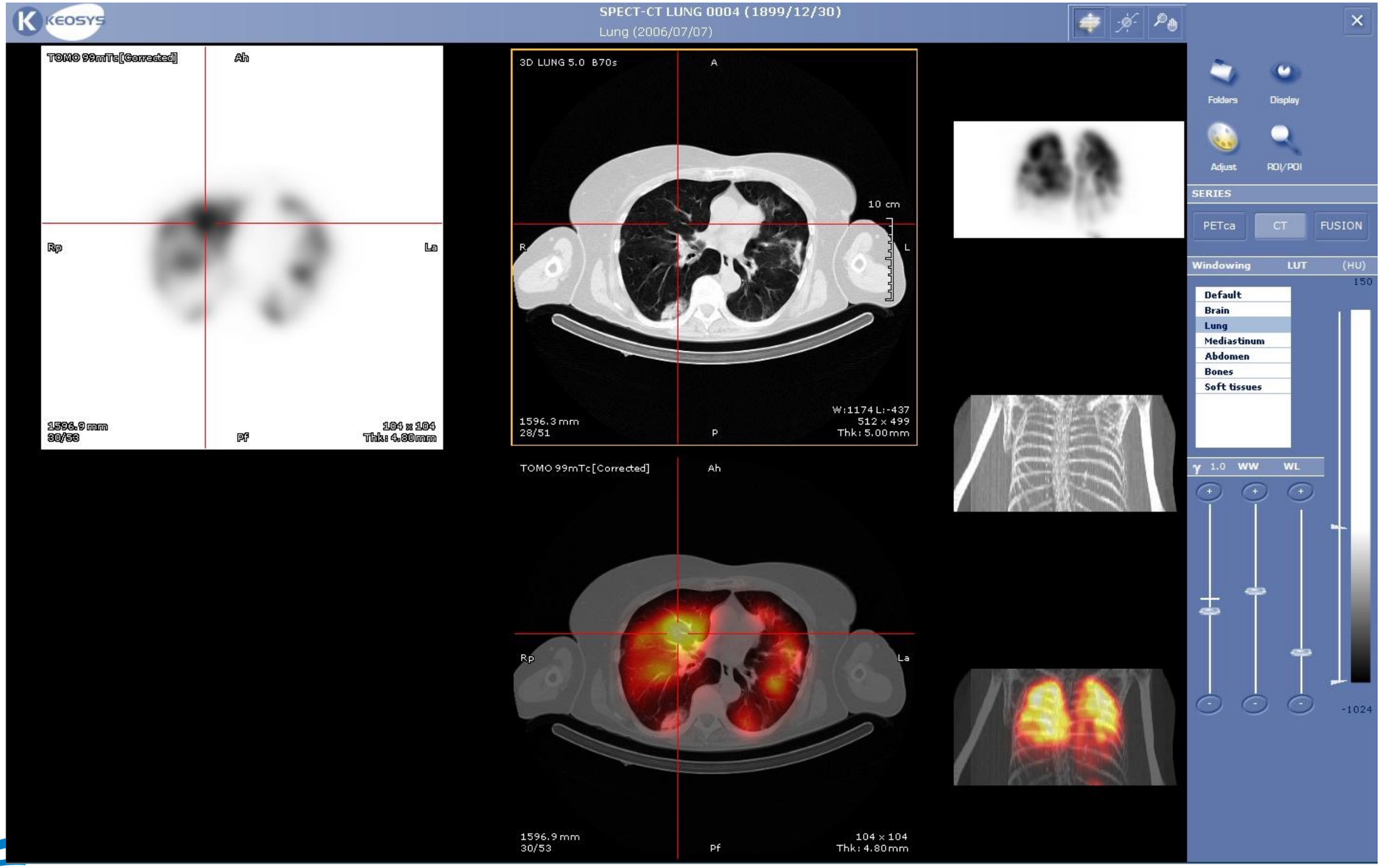
Medicina – Ressonância Magnética

software para visualização de imagens RM – Keosys



Medicina – Ressonância Magnética

OsiriX: consulta textual

imagem da região buco-facial

DSC/BCC – Multimídia

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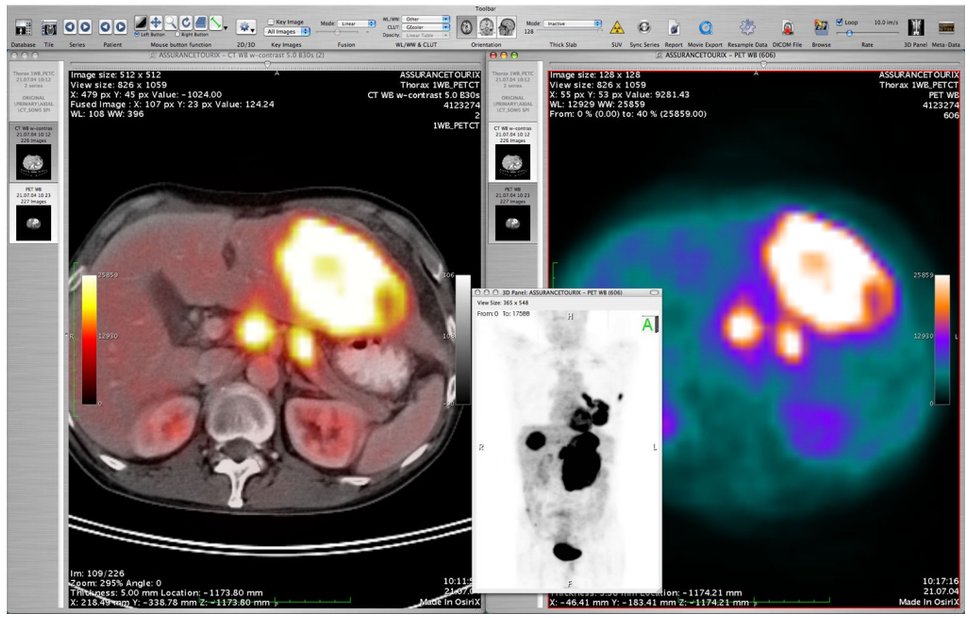
Medicina – Ressonância Magnética



OsiriX: imgem usando mapa de cores

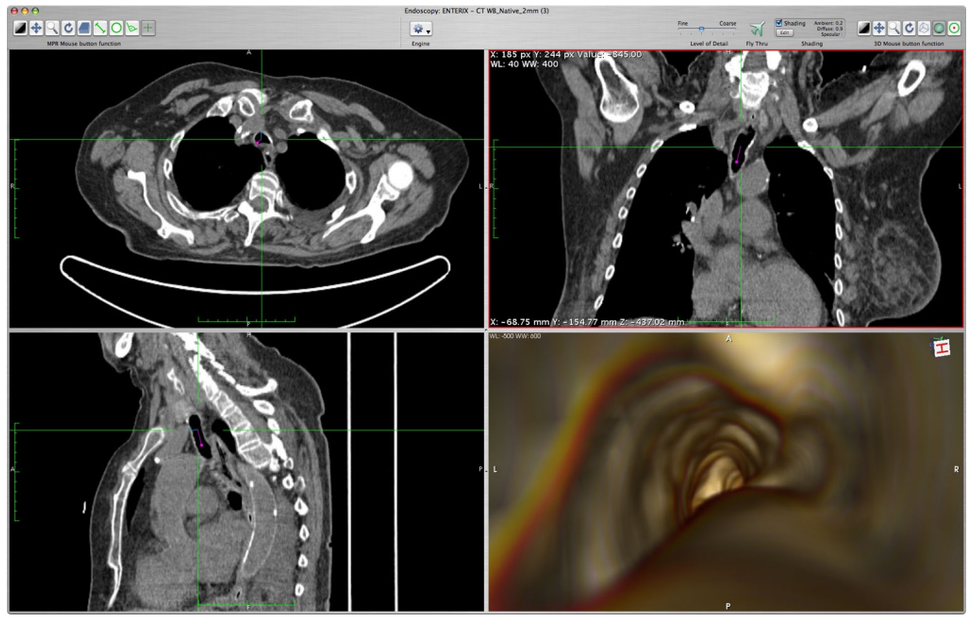
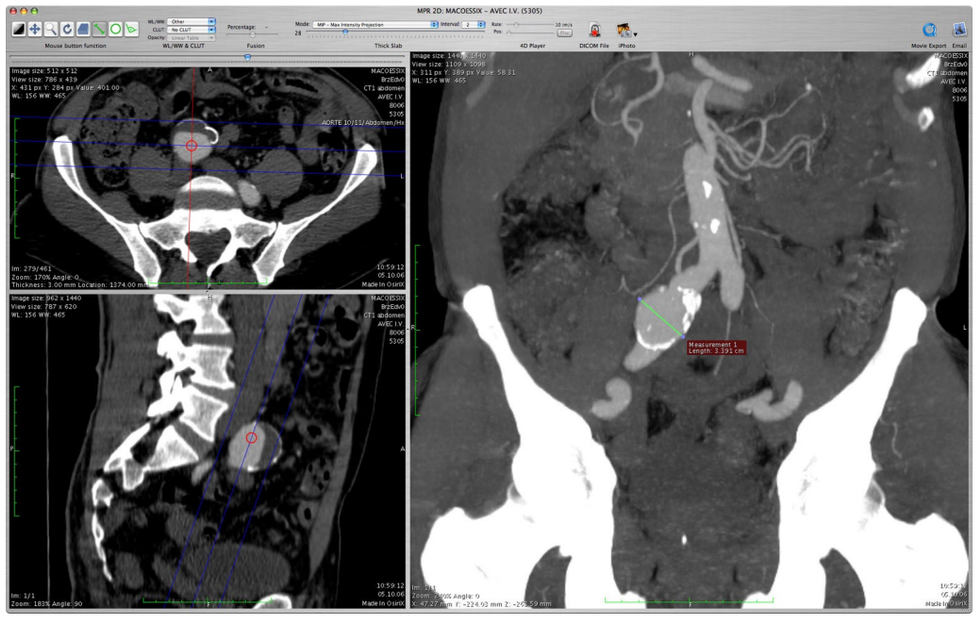


imagem de uma endoscopia



visão oblíqua

DSC/BCC – Multimídia

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Medicina – Ressonância Magnética

Duração: 5:26

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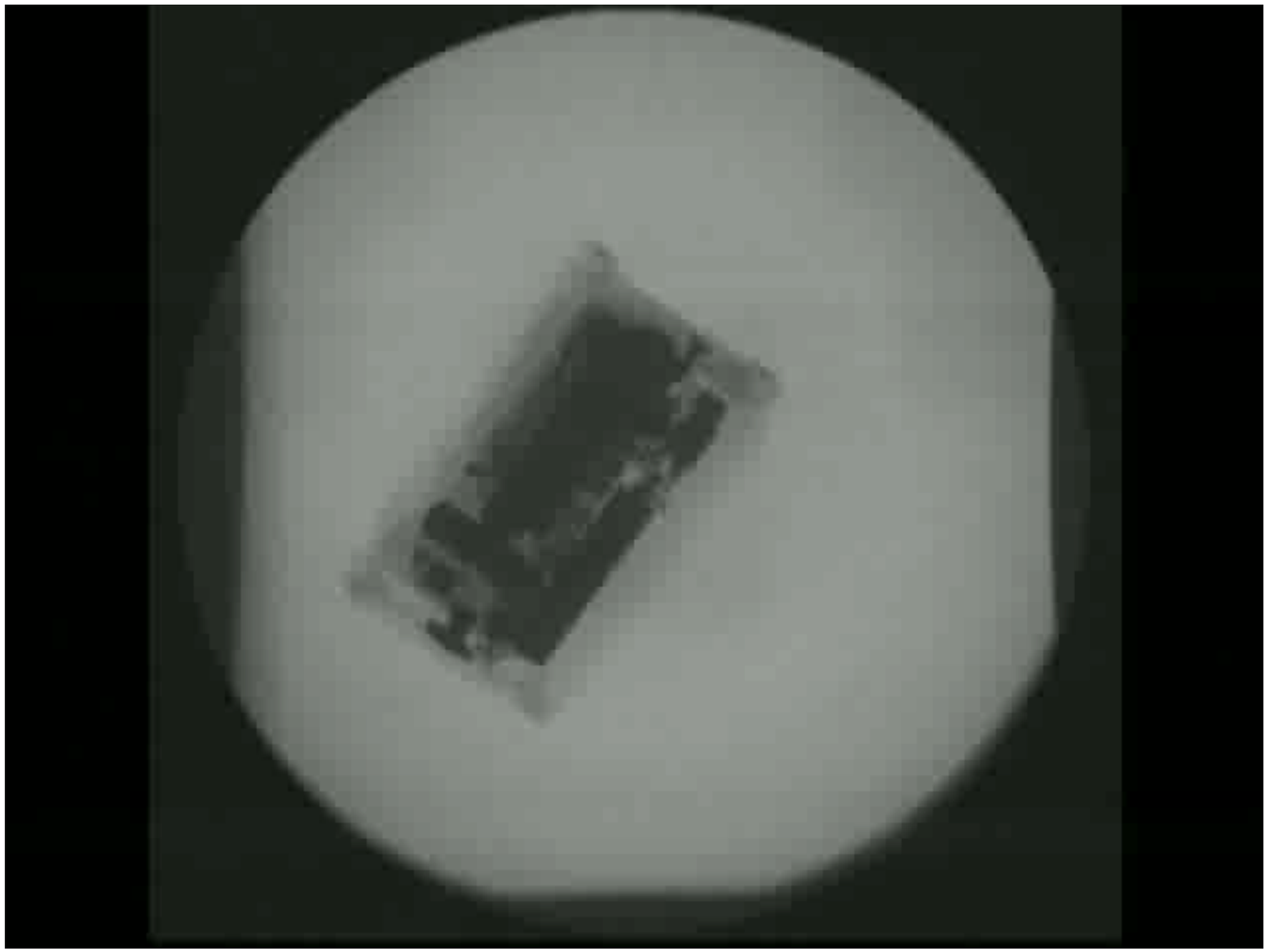
Profs. Dalton Reis - Paulo Rodacki

Medicina – Vide-deglutograma



Duração: 4:23

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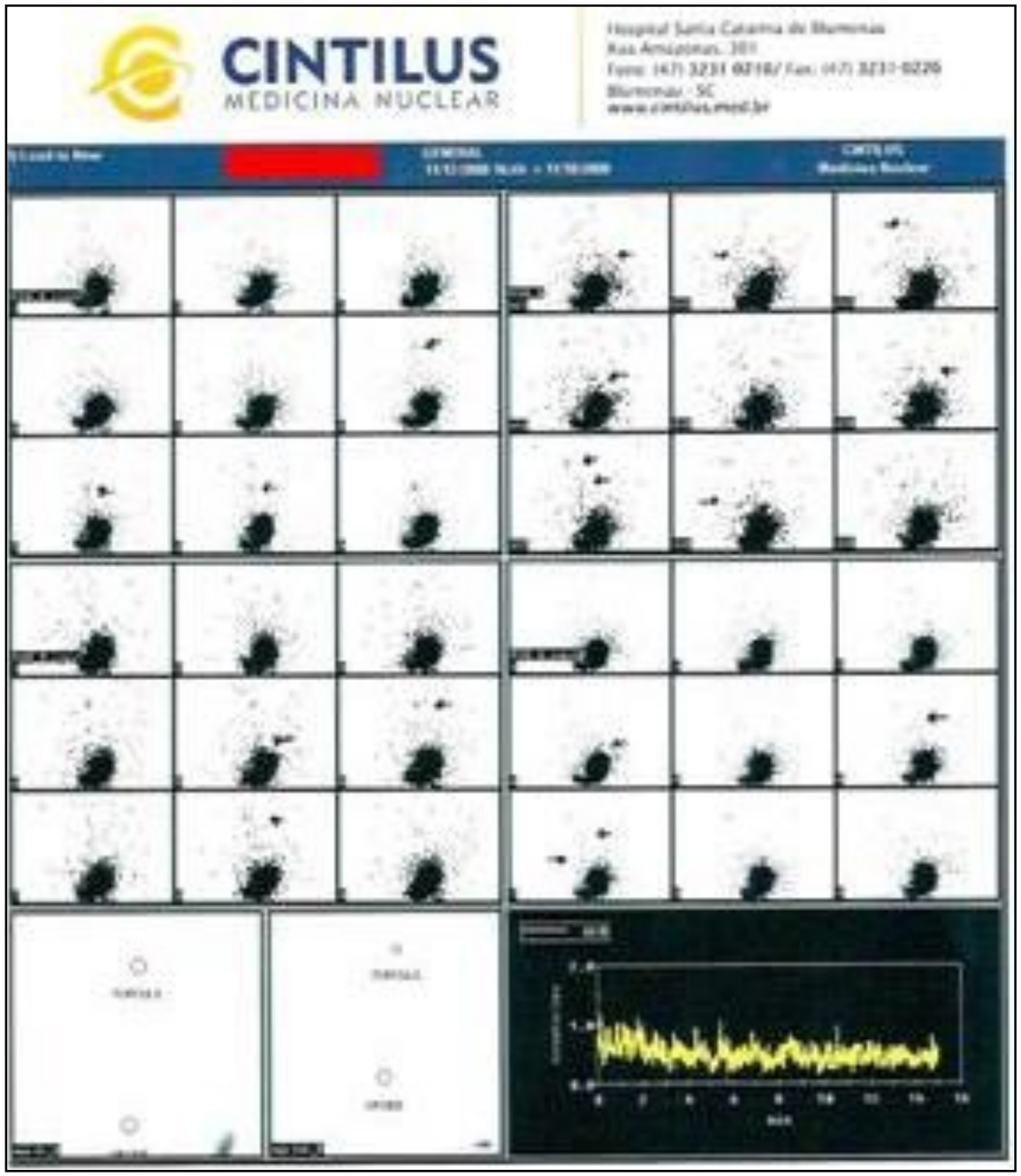
Medicina - Nuclear



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Blumenau - SC
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[redacted]

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Blumenau - SC
www.cintilus.med.br

Solicitante: Dr. (a) [redacted]
Nome: [redacted]
Idade: 5 anos
Data: 17/11/2008 12:52:00
Atend.: 1565355 Prescr. 0

Pesquisa de Aspiração Pulmonar e Refluxo Gastro-Esofáfico (RGE)

Técnica

Imagens seqüenciais a cada 2 segundos durante 15 minutos (agrupadas a cada 30 segundos) foram obtidas nas projeções anterior e posterior do tórax após administração oral de colóide-^{99m}Tc diluído em 120 ml de leite. **Foram feitas ainda, imagens estáticas do tórax com 4 e 24 horas para pesquisa de aspiração pulmonar.**

Descrição

Observam-se múltiplos pequenos episódios de refluxo gastro-esofágico distais com máximo de 8 segundos (**>80 micro-refluxos durante todo o estudo**), **46 episódios** com maior duração de 8 segundos atingindo o terço médio, e **25 episódios** com maior duração de 12 segundos chegando ao esôfago proximal e boca. Os refluxos proximais estão relacionados principalmente com o grau de enchimento gástrico (maioria no início até a metade do exame).

Não evidenciamos nas imagens de 4 e 24 horas a presença de material marcado nos pulmões, entretanto com considerável quantidade do radiofármaco na boca (RGE atingindo a esôfago proximal, sem aspiração pulmonar).

Conclusão

Estudo negativo para aspiração pulmonar.

Estudo positivo para múltiplos refluxos gastro-esofágicos, com episódios que atingem os terços distal (múltiplos com duração máxima de 8 segundos), médio (>40 episódios com duração máxima de 8 segundos), e proximal do esôfago (>20 episódios com duração máxima de 12 segundos).

Dr. [redacted]
Médico Nuclear
CRM/SC [redacted]

Medicina – Exame de vista

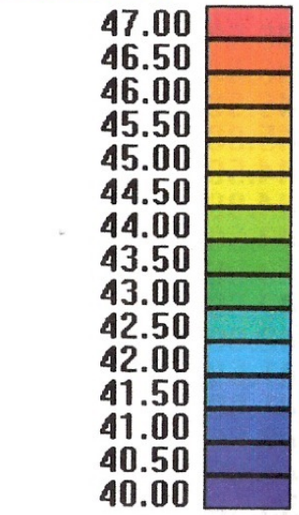
DALTON REIS

Patient ID: 65646
Exam #: , OD

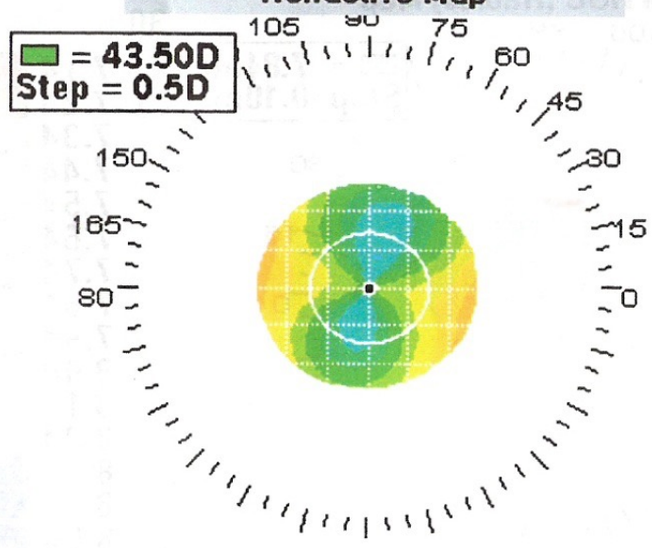
Holladay Diagnostic Summary 2000

OFTALMOCLÍNICA [illegible]

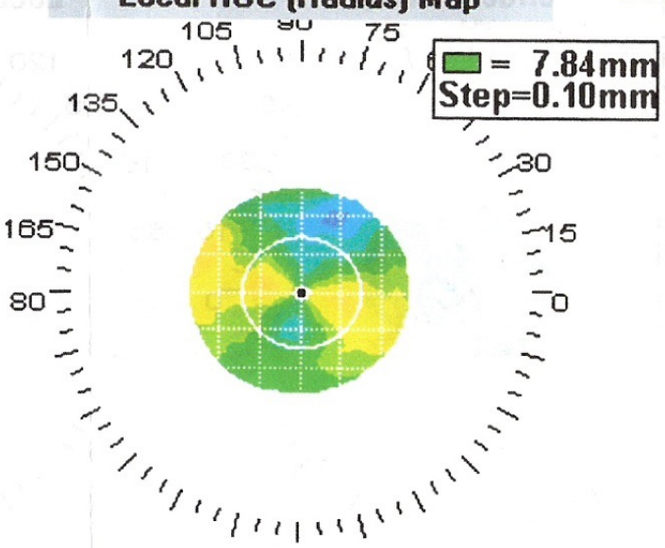
BLUIMENAU [illegible]
30-07-2009 17:53:53

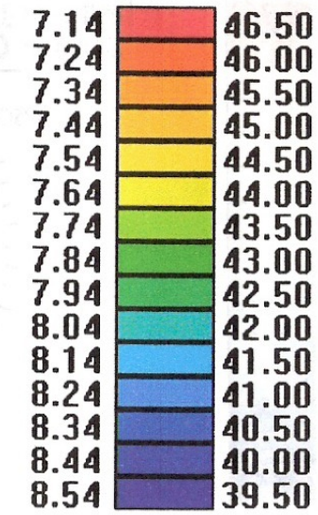


Refractive Map

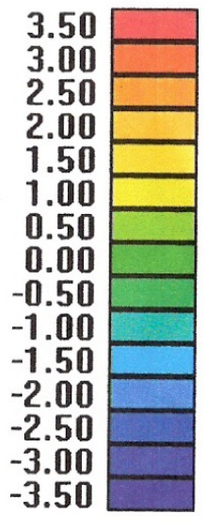


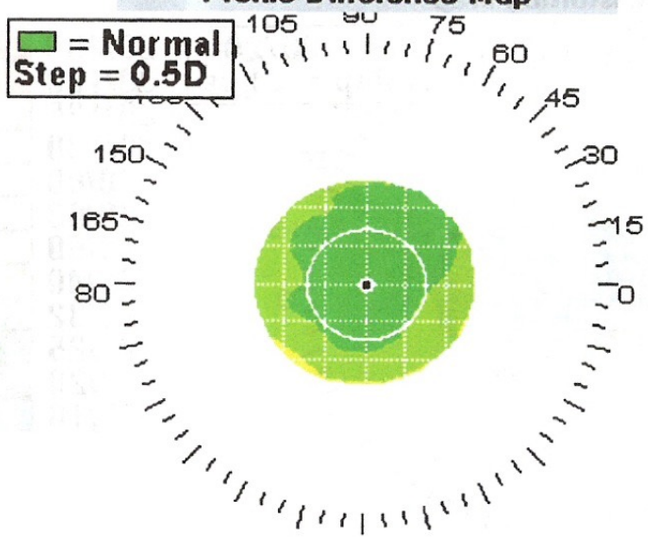
Local ROC (Radius) Map



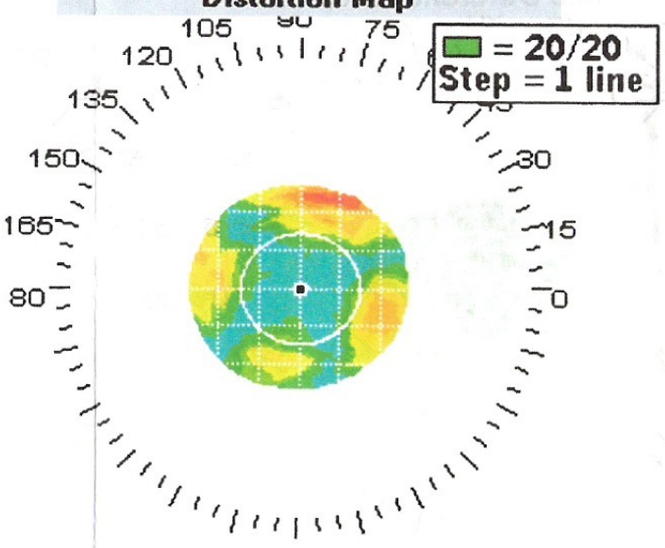


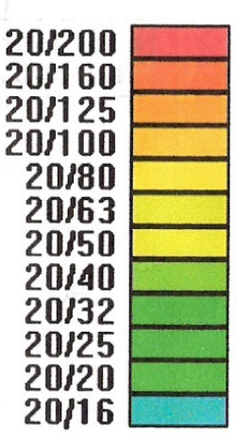
Profile Difference Map





Distortion Map





Corneal Parameters for 3mm pupil

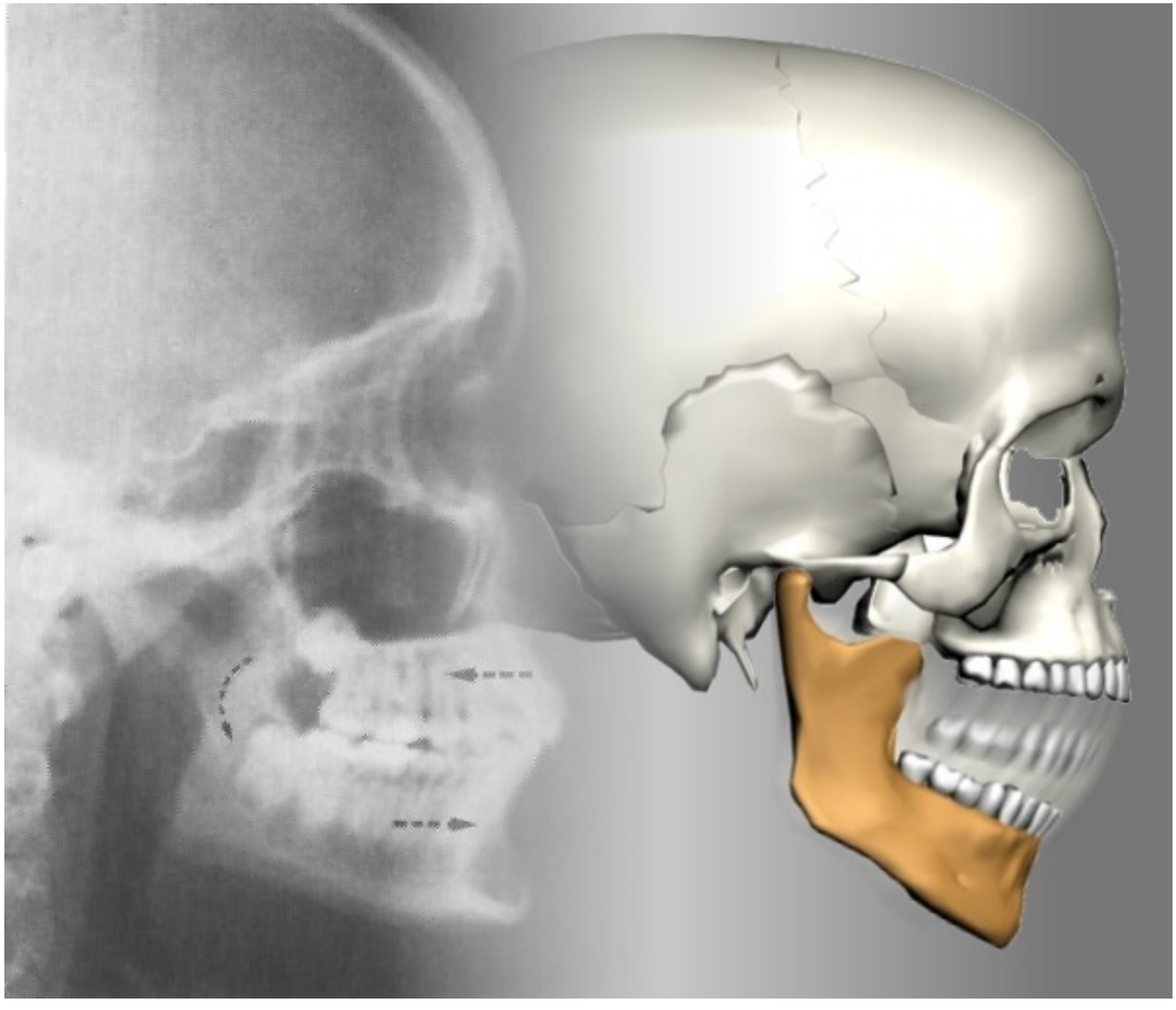
Steep RP	= 44.03D @ 174°	Steep Sim K	= 44.29D @ 165°	H Pupil Dec	= 0.00mm IN	Asph(Q)	= -0.09
Flat RP	= 42.39D @ 72°	Flat Sim K	= 42.24D @ 75°	V Pupil Dec	= 0.00mm UP	CU Index	= 90%
Tot Astig	= + 1.64D @ 174°	Delta K	= + 2.05D @ 165°	Avg Pupil Dia	= 4.59mm	PC Acuity	= 20/20
Eff RP	= 43.23D	Avg Sim K	= 43.27D	Reg Astig	= + 1.63D @ 166°	I-S Value	= N/A (p=N/A)

Medicina - interação

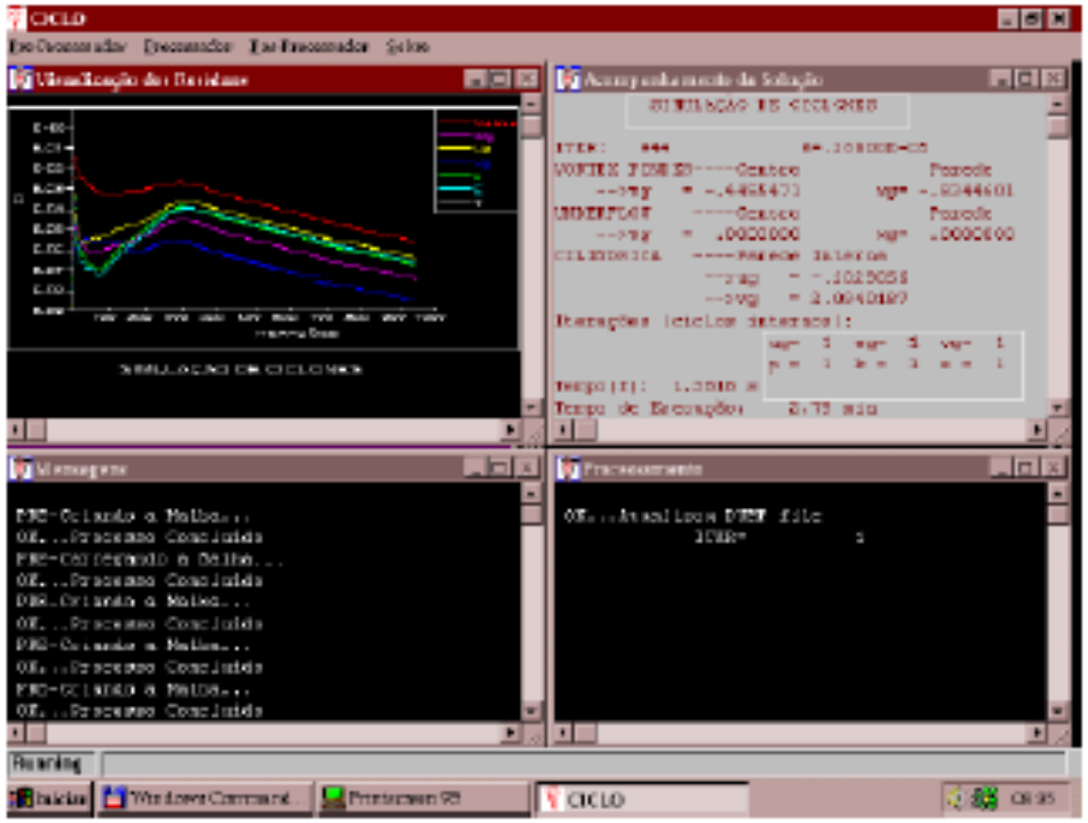
Modelagem anatômica do sistema mastigatório
em humanos virtuais

UFRGS – CG
Marta Becker Villamil
Carla Freitas

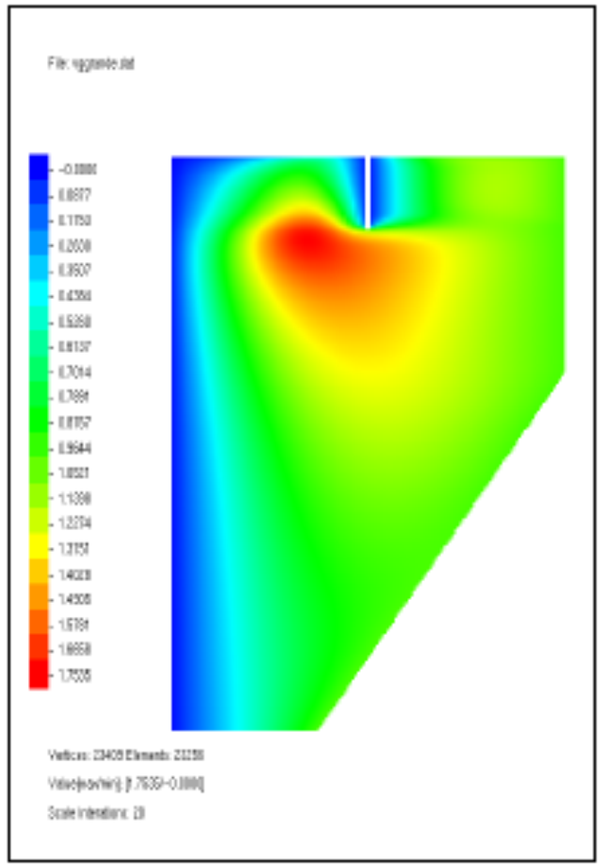
http://www.inf.ufrgs.br/~mbvillamil/index.htm



Simulação dinâmica de fluidos – TCC



Tela de acompanhamento da solução do software Cyclo-Hexa



Uso da técnica color transformation representando um campo escalar

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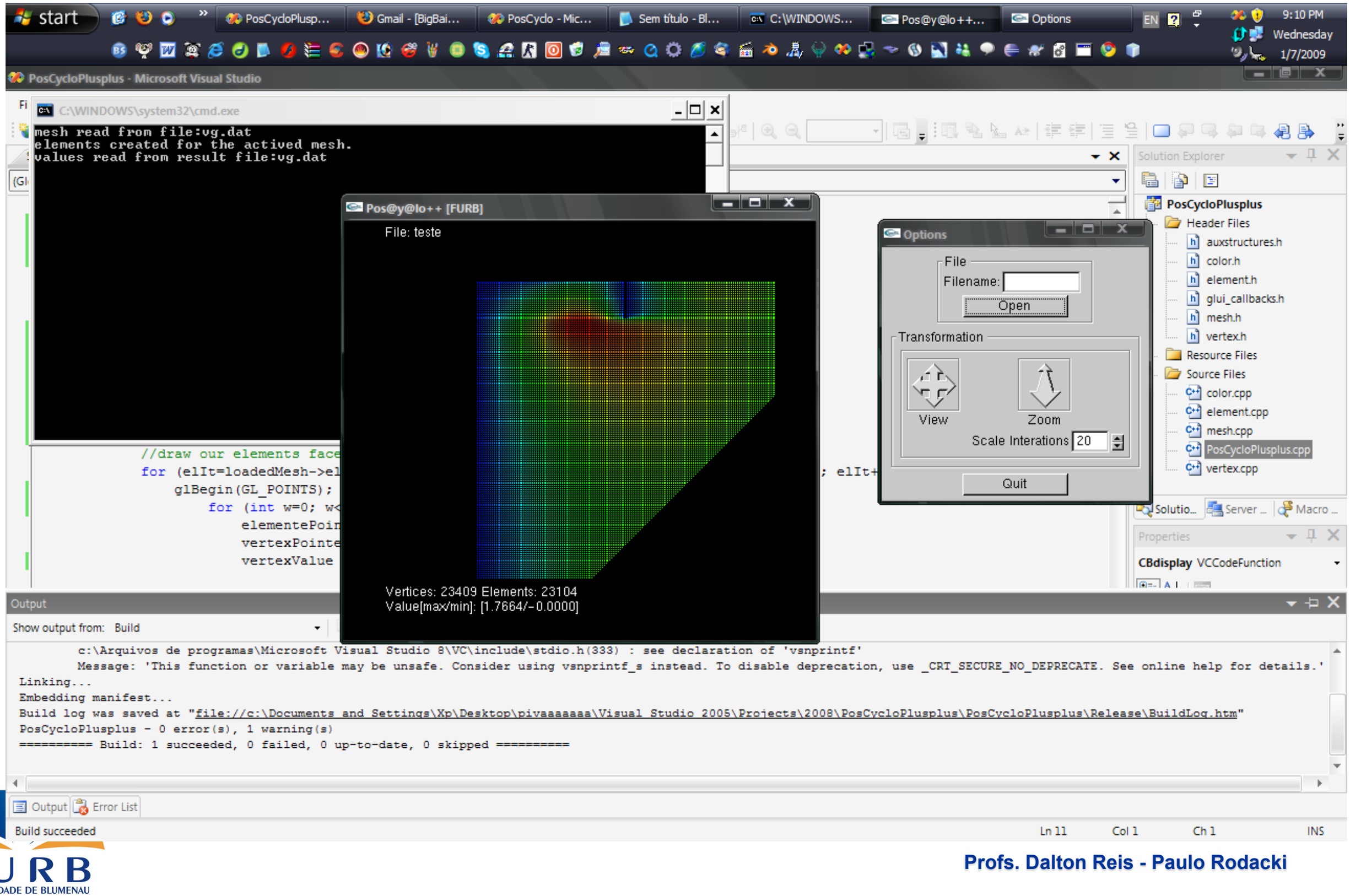
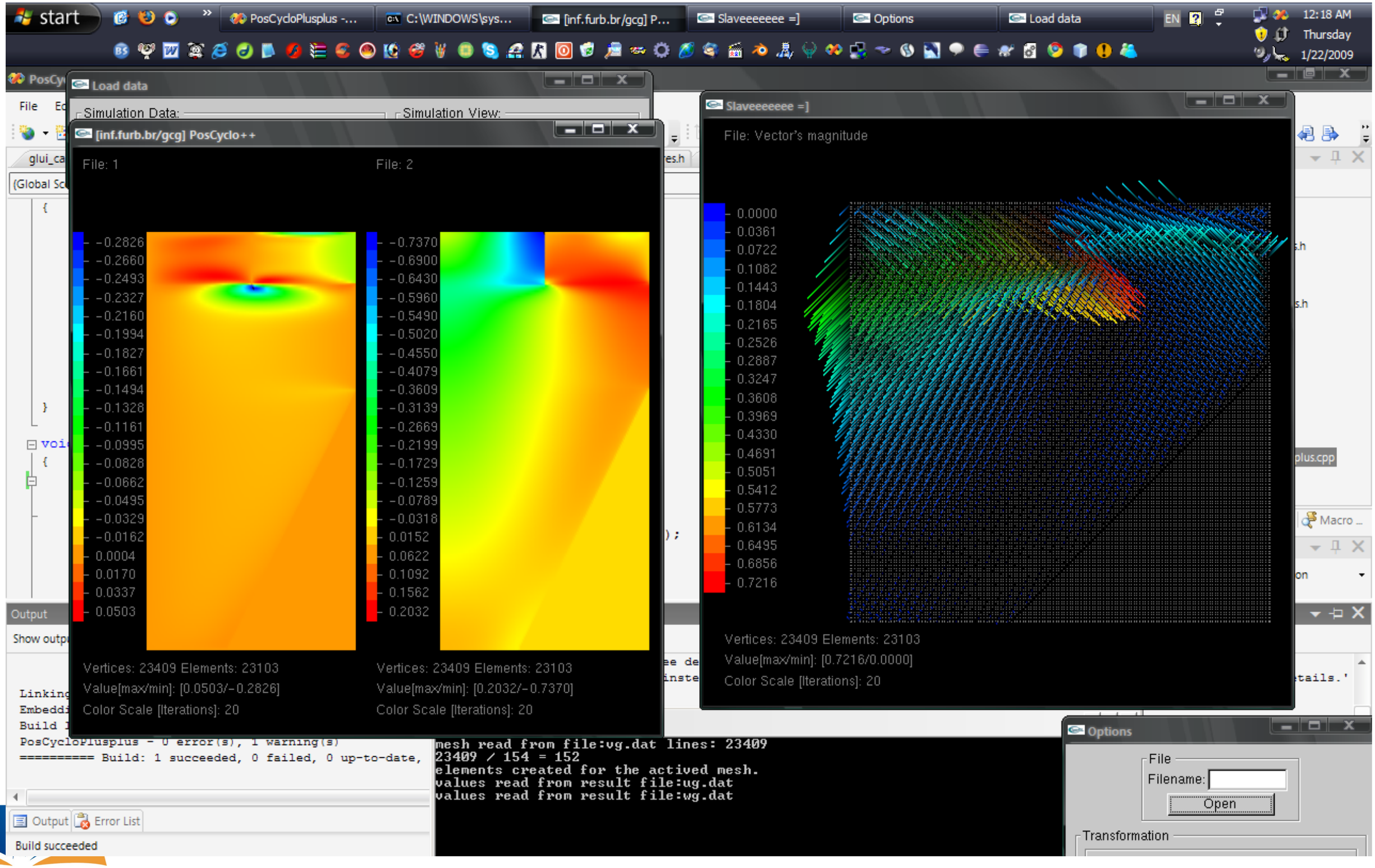
Simulação dinâmica de fluidos – TCC



Simulação dinâmica de fluidos – TCC



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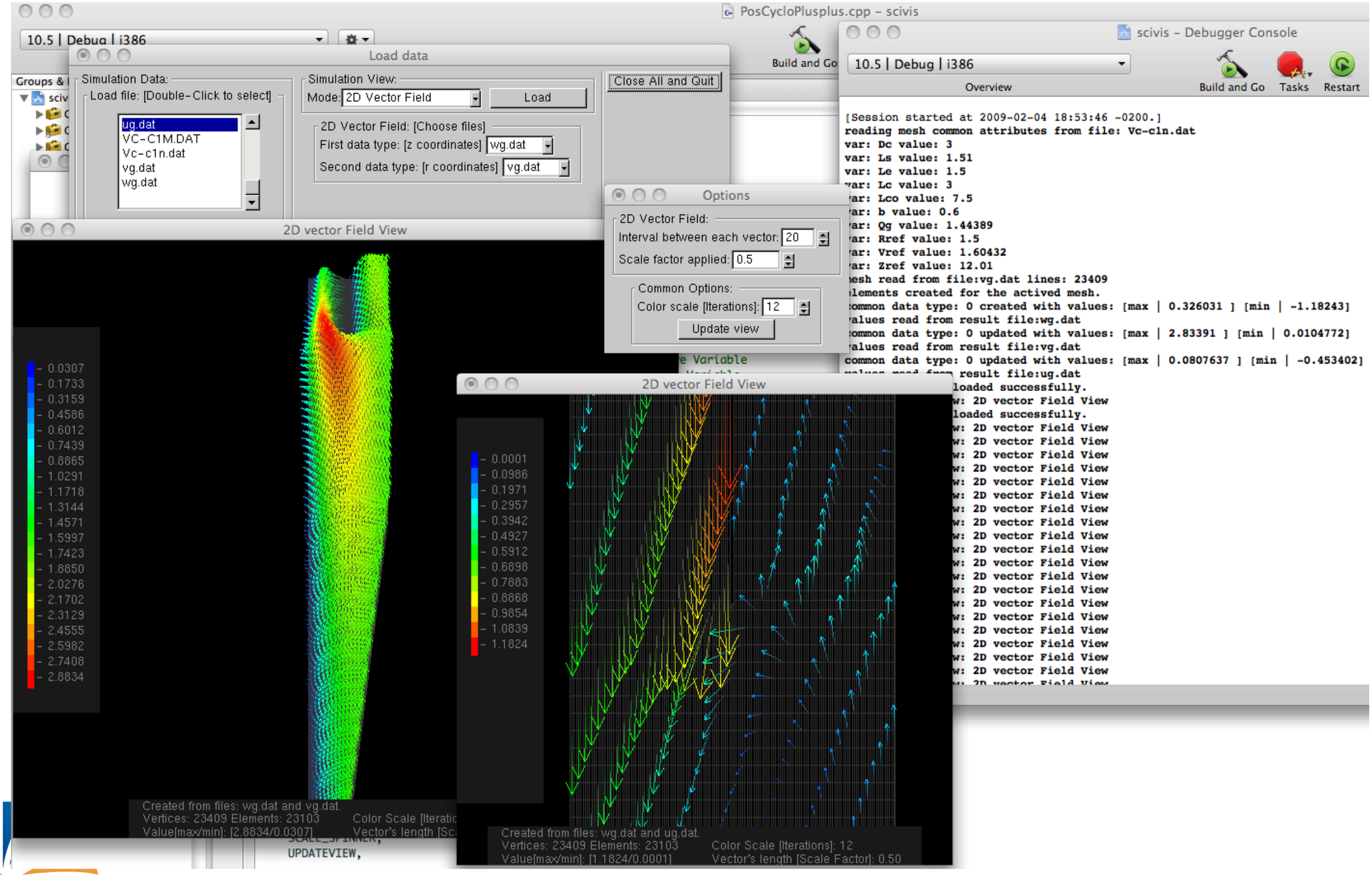

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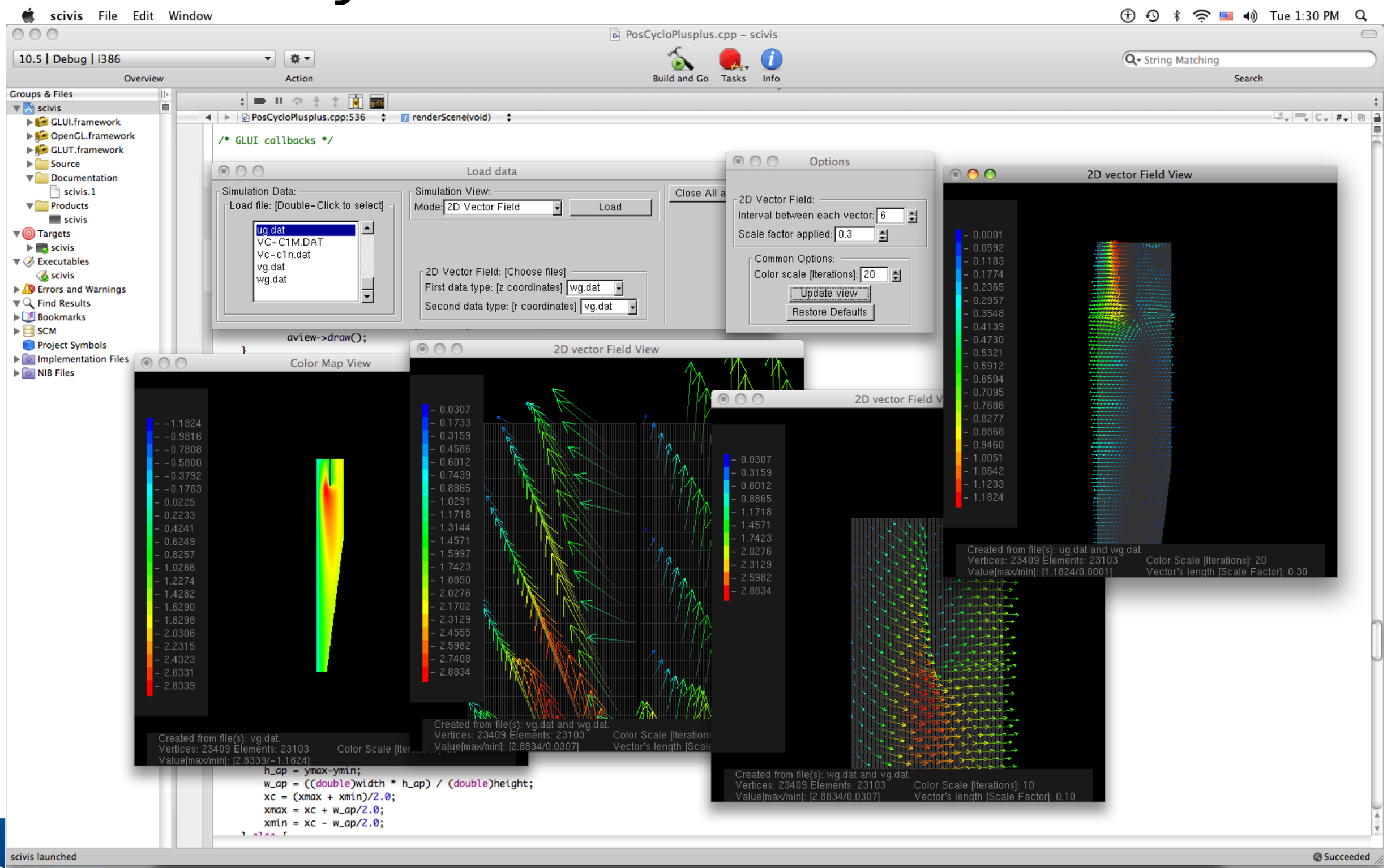
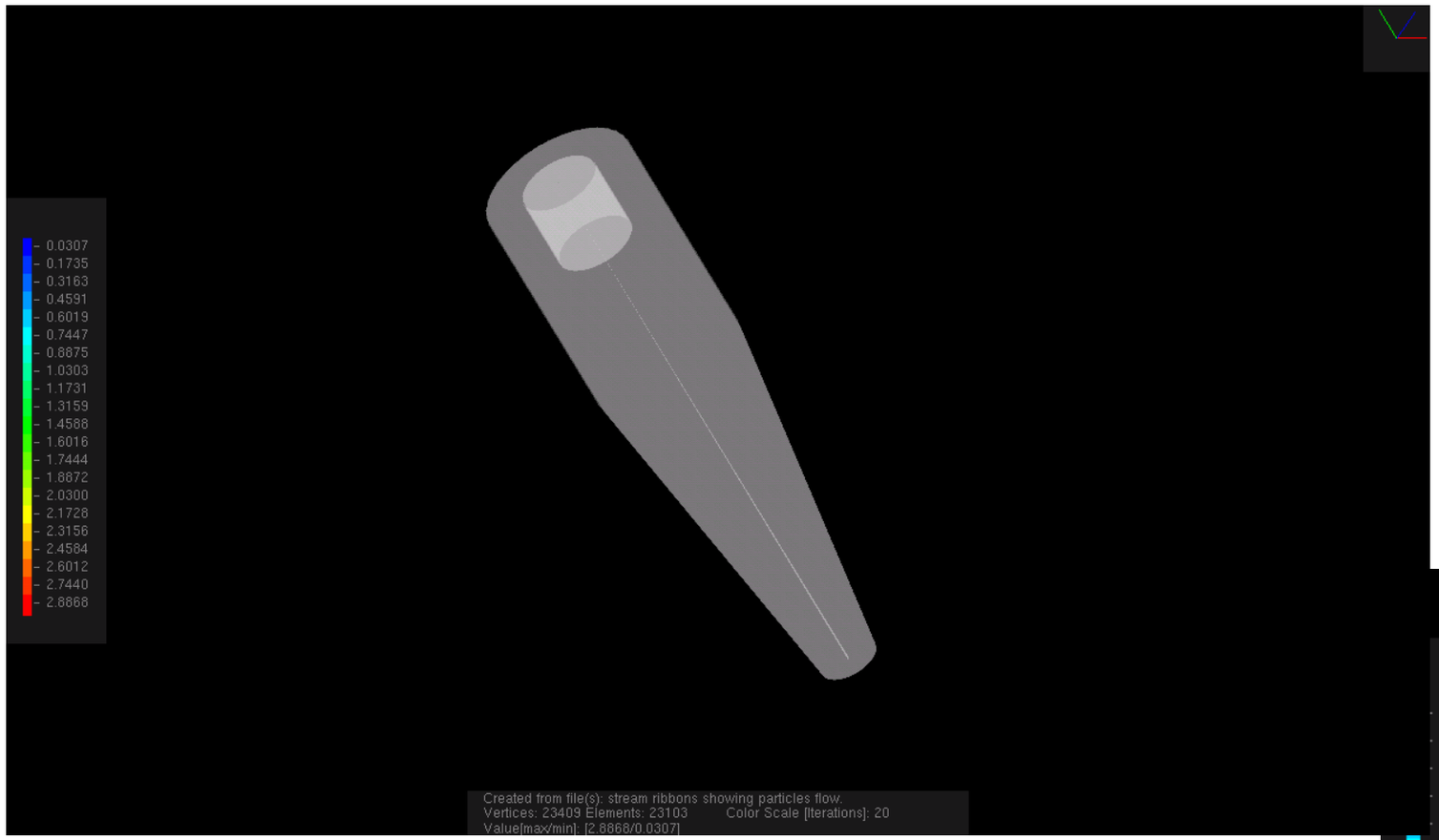
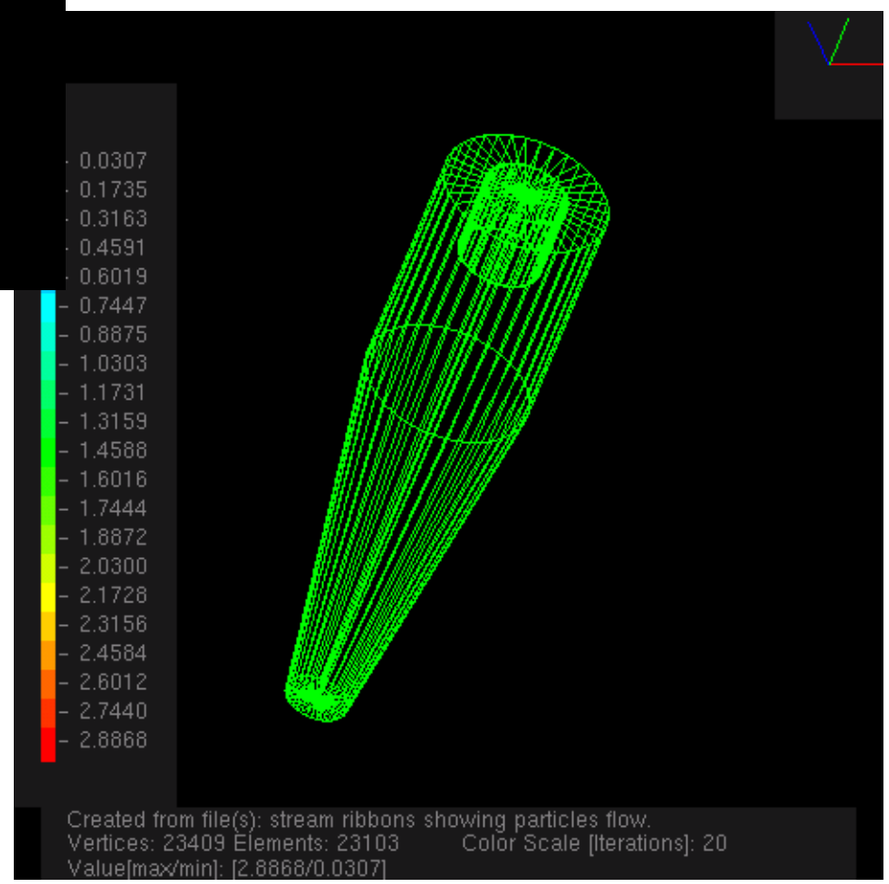
Simulação dinâmica de fluidos – TCC



DSC/BCC – Multimídia

Simulação: dinâmica de fluidos





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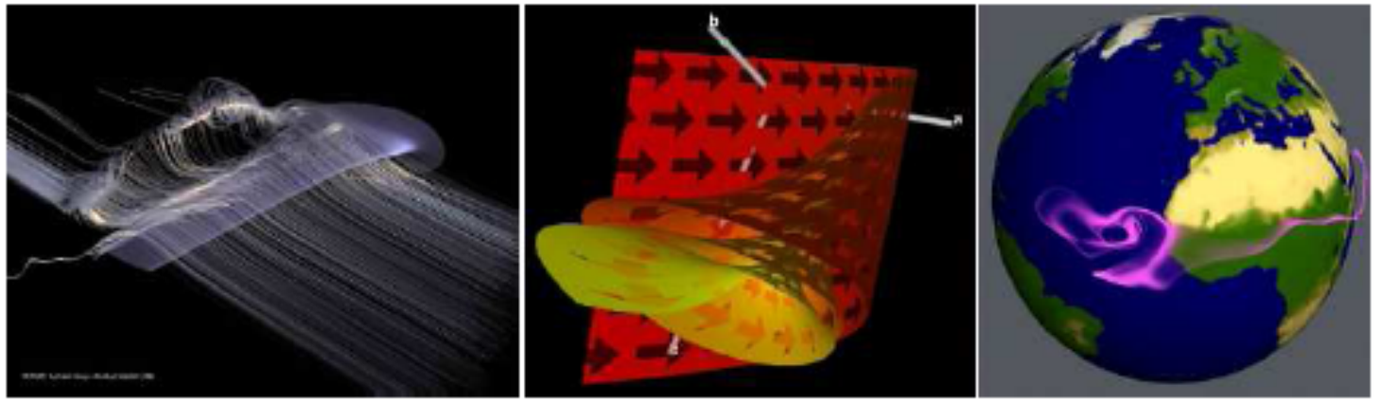
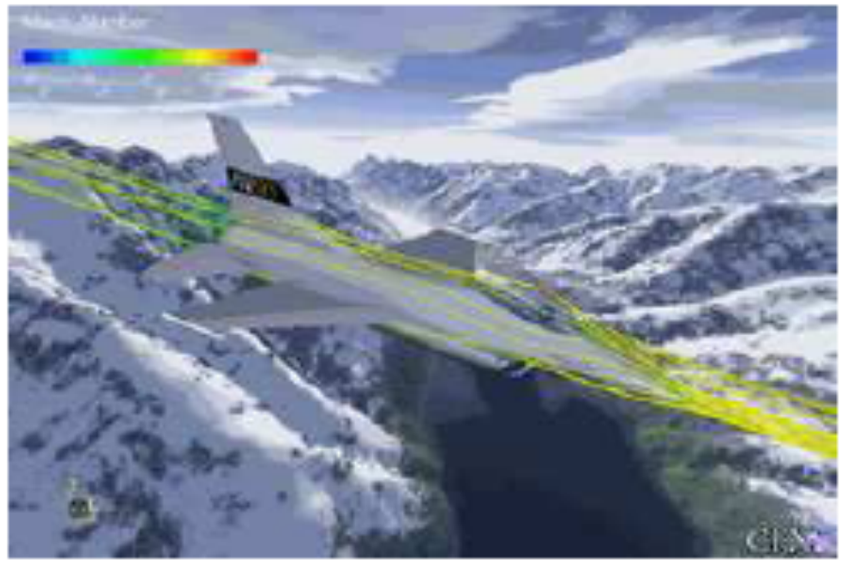
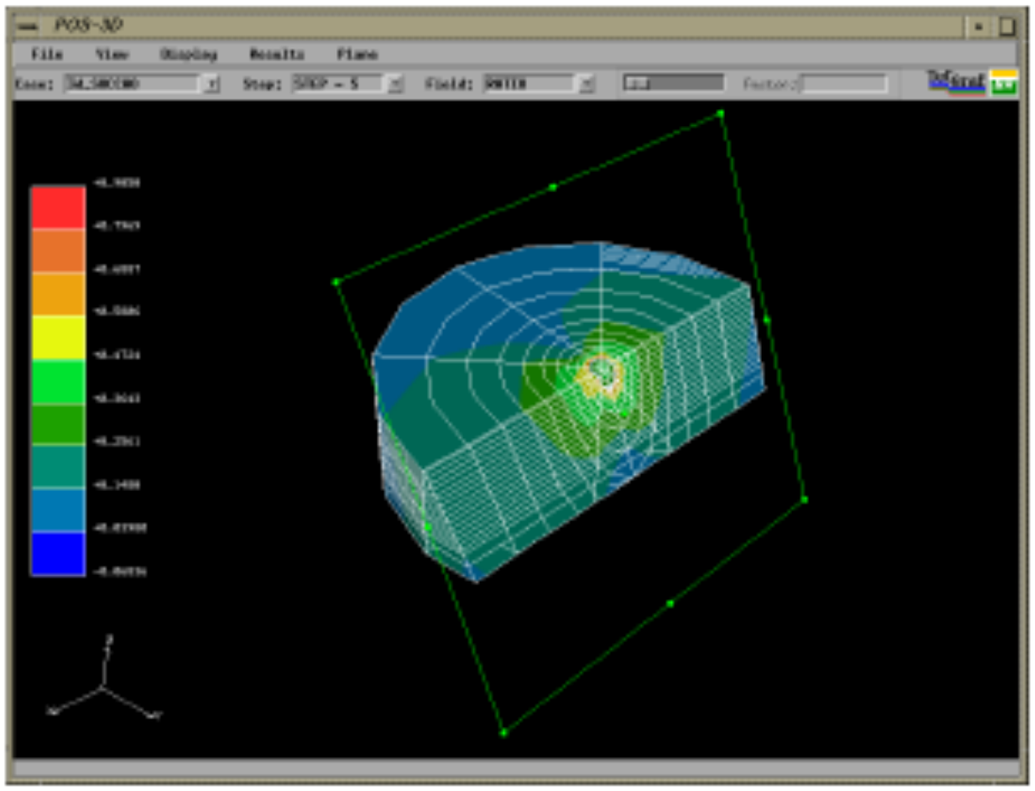
Simulação: dinâmica de fluidos



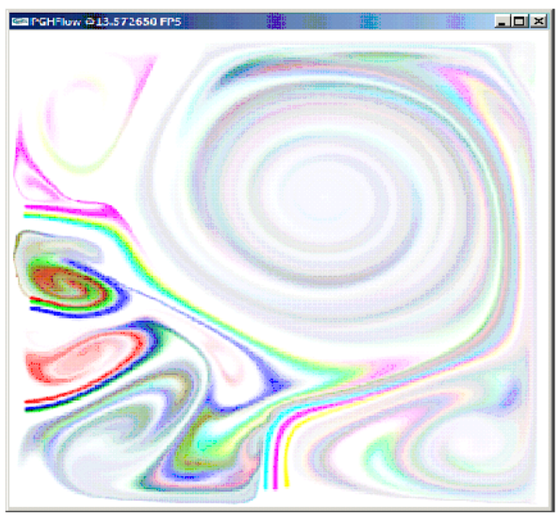
Exemplos de visualização de fluxos utilizando técnicas de streamlines (esquerda), stream arrows (centro) e flow volume (direita).

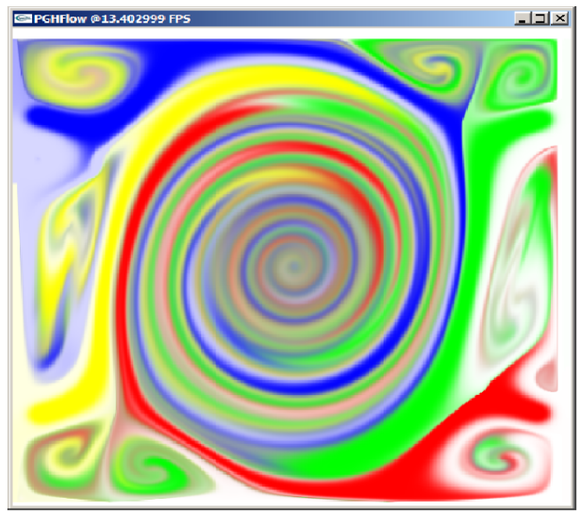


ANSYS CFX Post-Processor



Interface do software Pos3D





UFRGS – usando GPU

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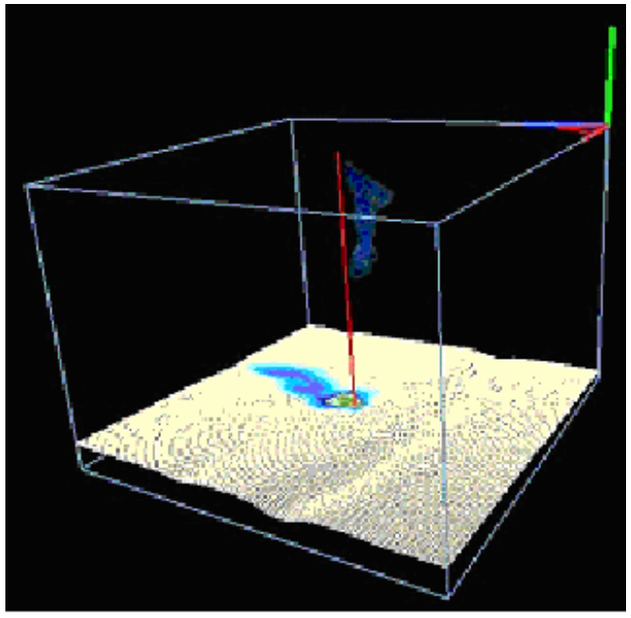
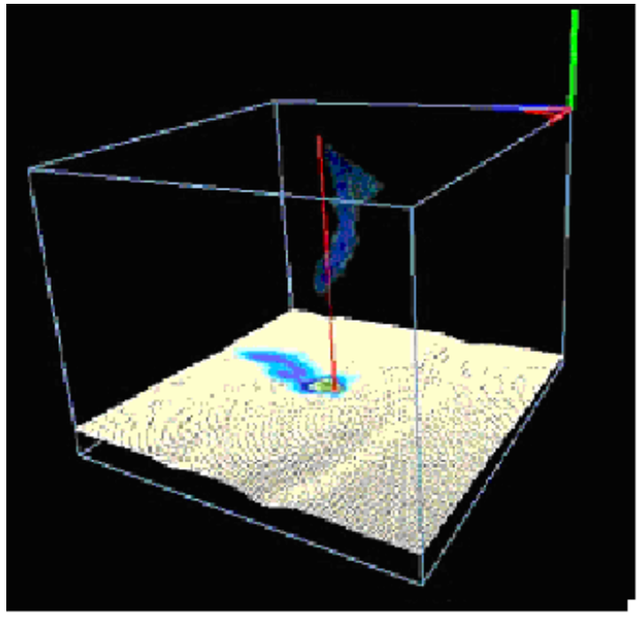
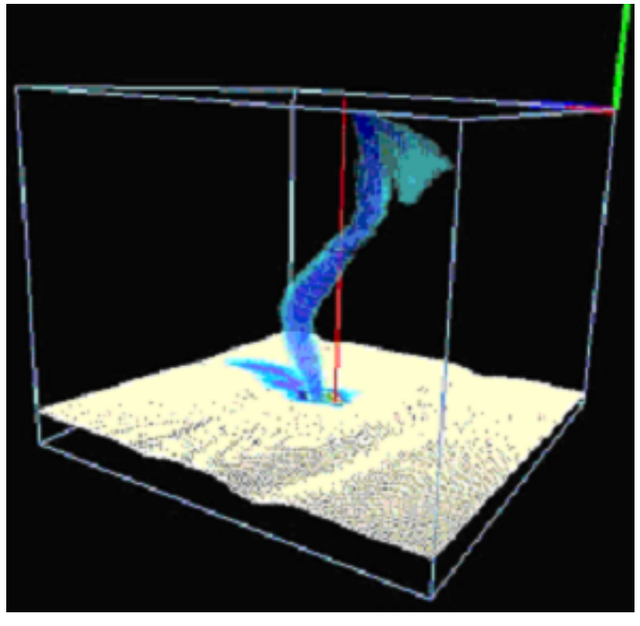
Visualização volumétrica

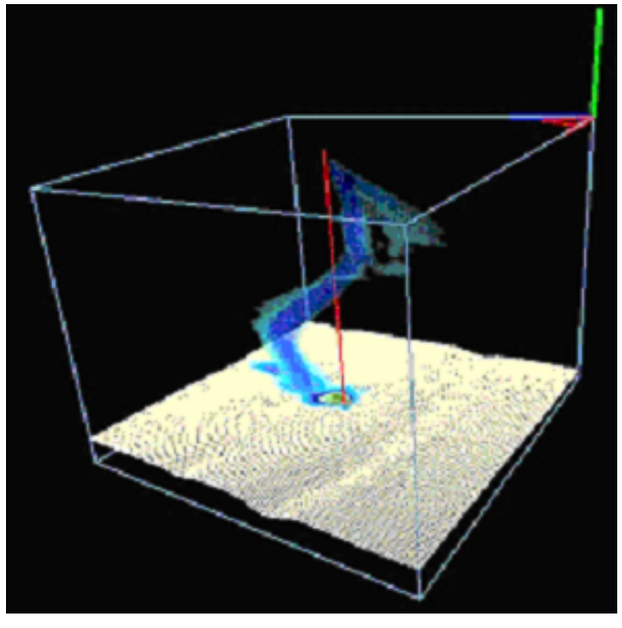
Dados com variação temporal em tempo-real

UFRGS – CG
Carla Freitas





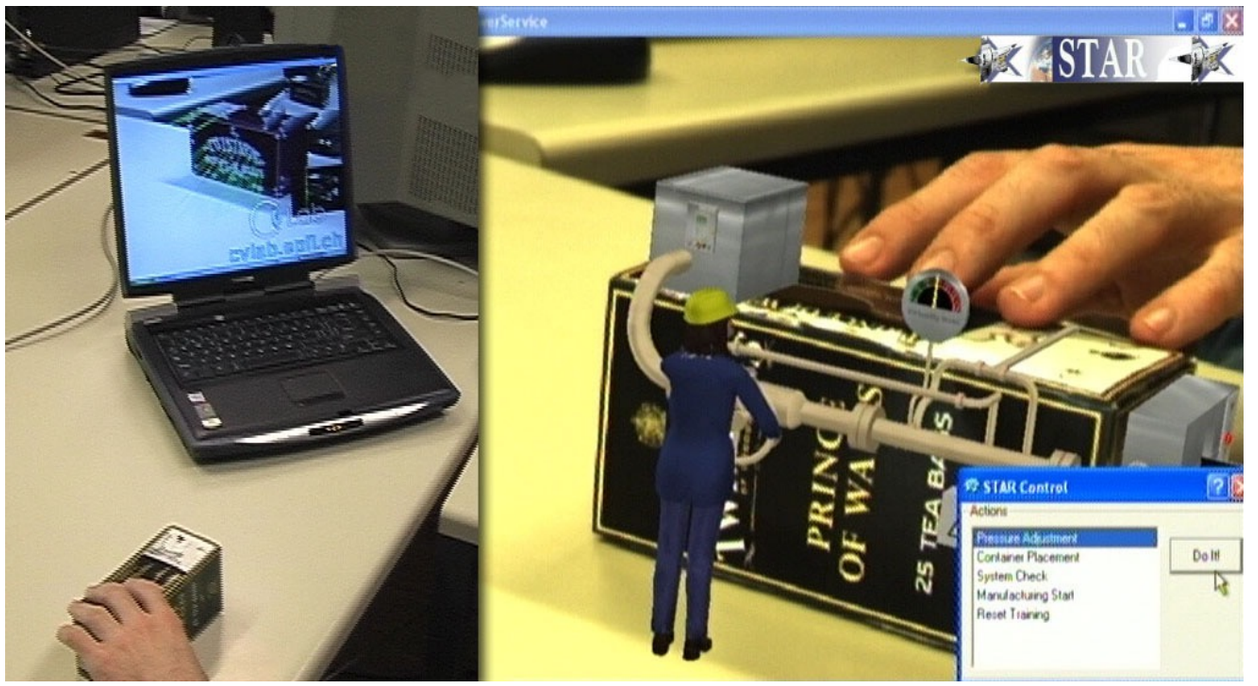


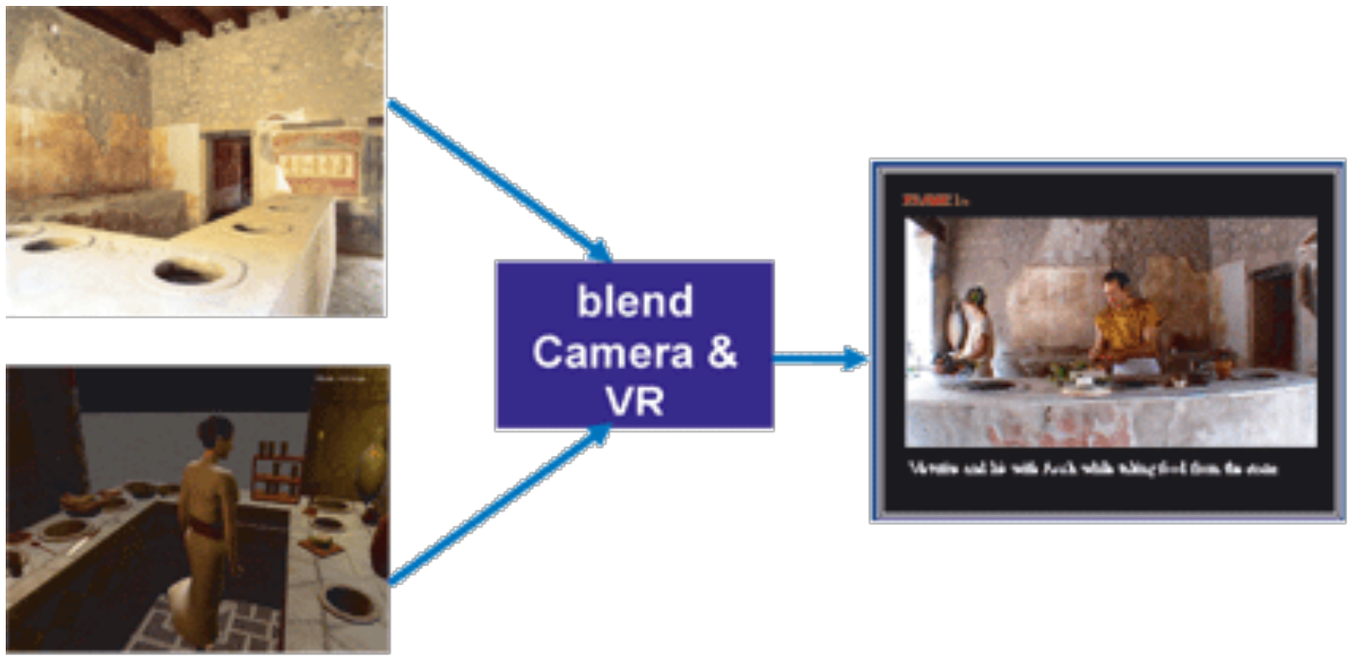


Realidade Virtual – RV - VRlab

- http://vrlab.epfl.ch/
- The Virtual Reality Lab (VRlab), formerly Computer Graphics Lab (LIG), at the Swiss Federal Institute of Technology (EPFL) in Lausanne (map) was founded in July 1988 by its director, Professor Daniel Thalmann. The laboratory is mainly involved in the modelling and animation of Three-Dimensional Inhabited Virtual Worlds. VRlab is a world leader laboratory in real-time Virtual Humans and a key player in the area of multimodal interaction, immersive Virtual Environments, and Augmented Reality.

RV - VRlab - Augmented Reality





http://vrlab.epfl.ch/research/AR_augmented_reality.html

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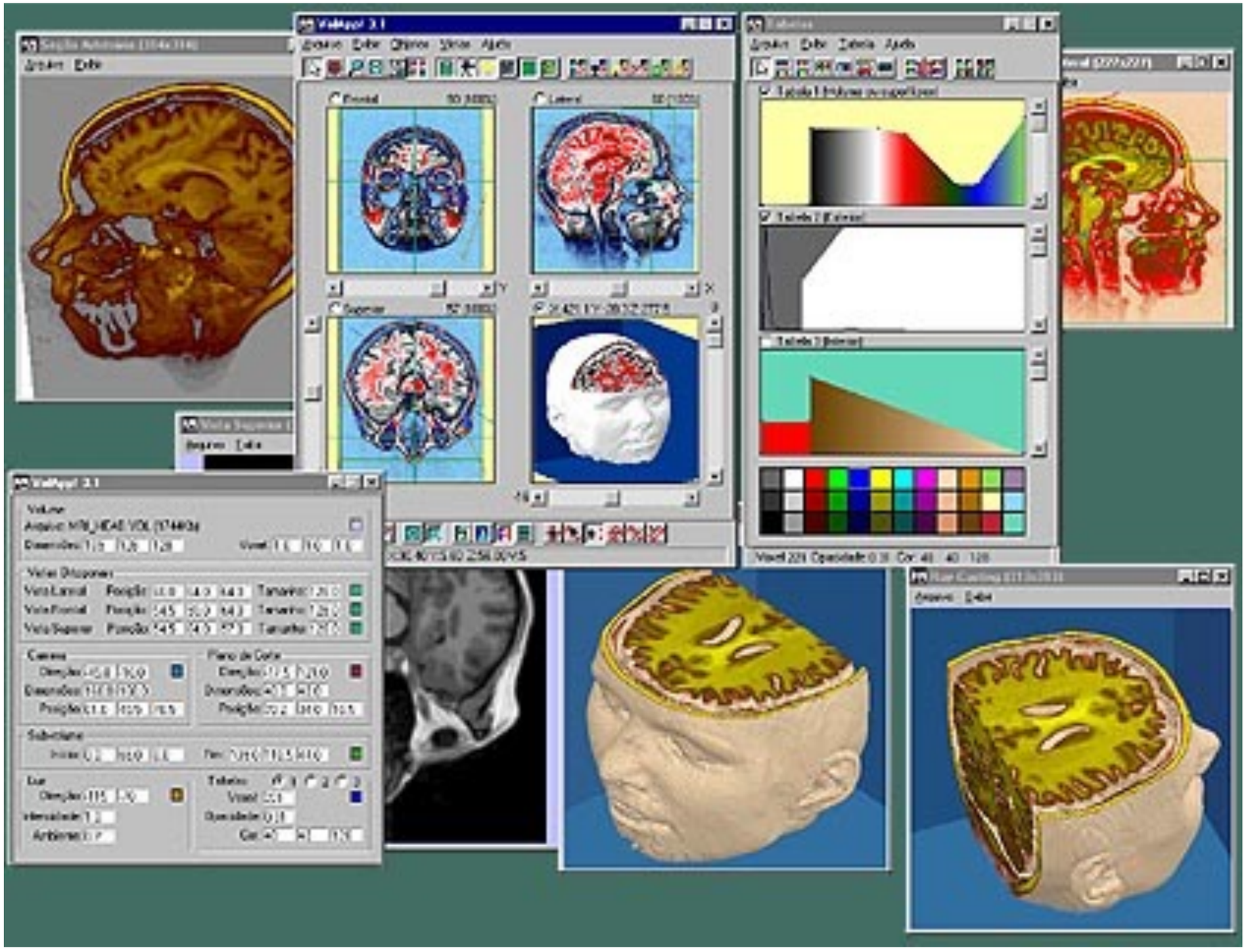
RV - Augmented Reality



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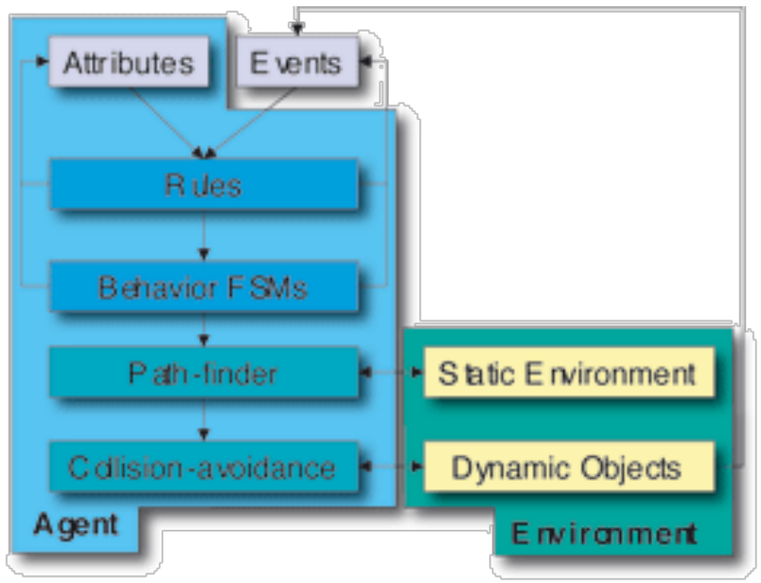
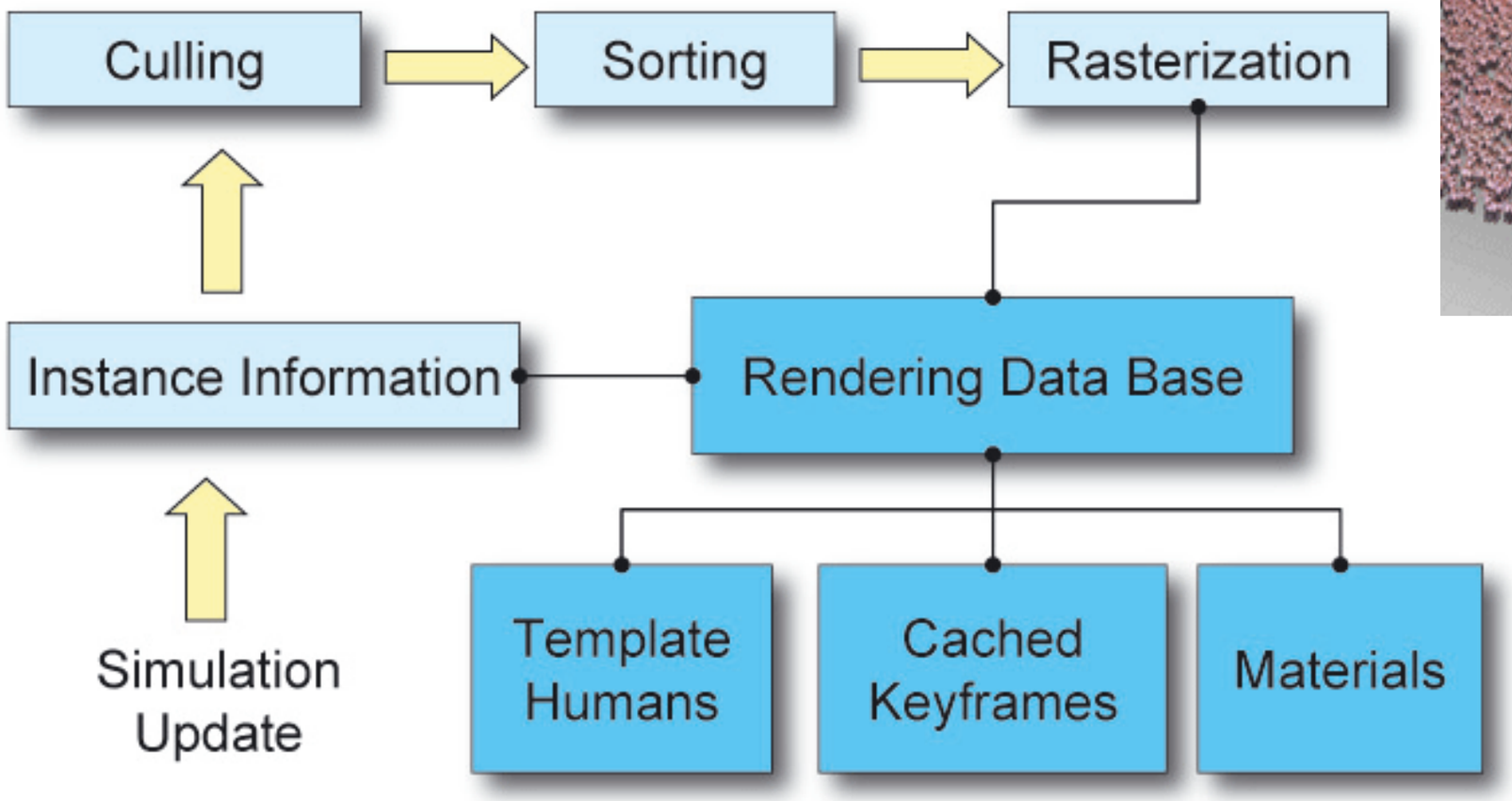
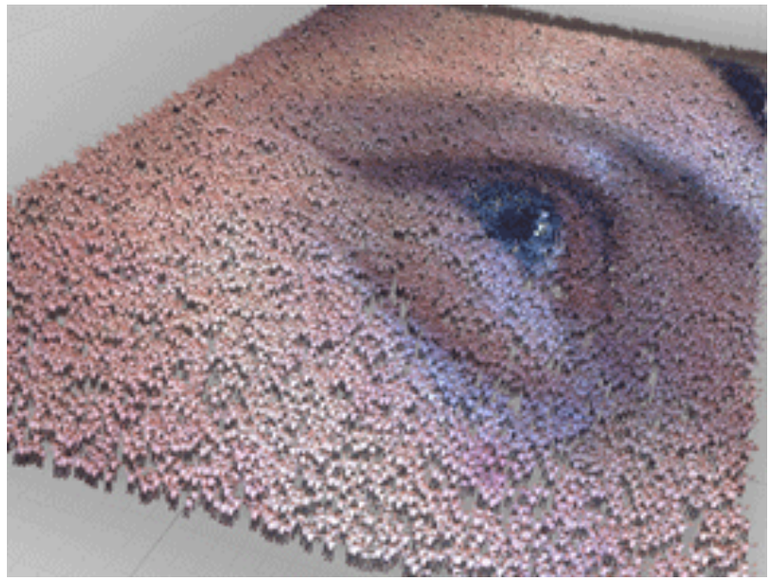
RV - VRlab - Virtual Crowds



http://vrlab.epfl.ch/research/VC_virtual_crowds.html

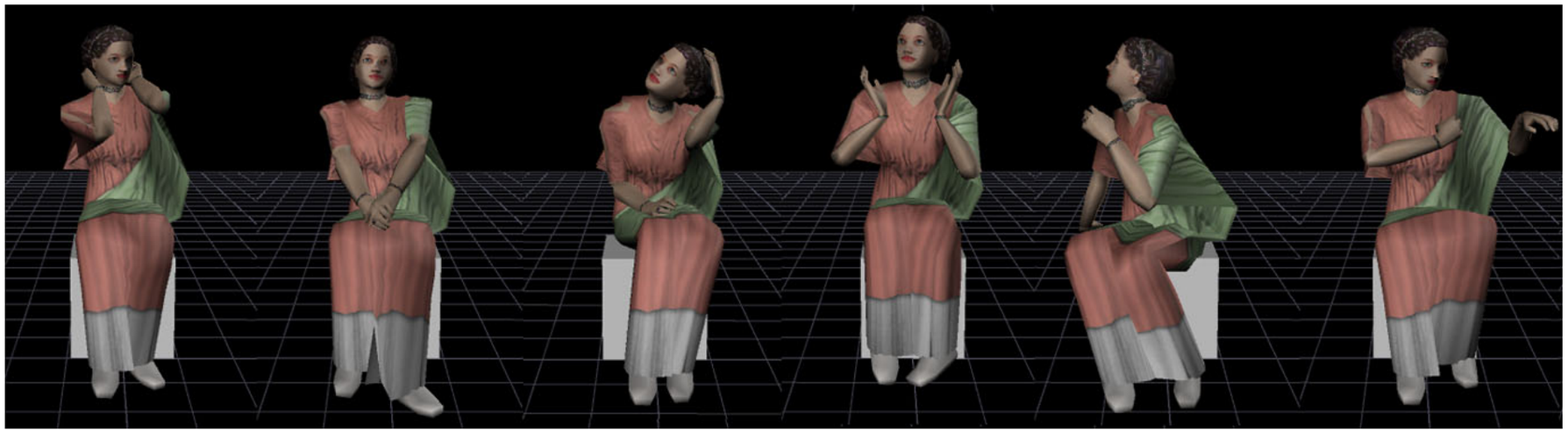
RV - VRlab - Virtual Crowds

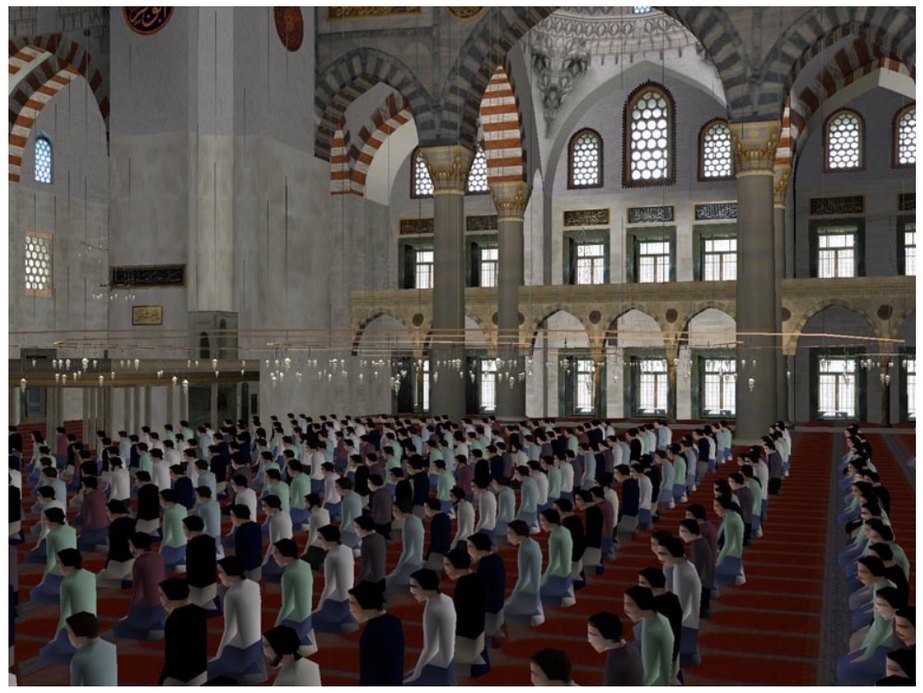




http://vrlab.epfl.ch/research/VC_virtual_crowds.html

RV - VRlab - Cultural Heritage





http://vrlab.epfl.ch/research/CA_cultural_heritage.html

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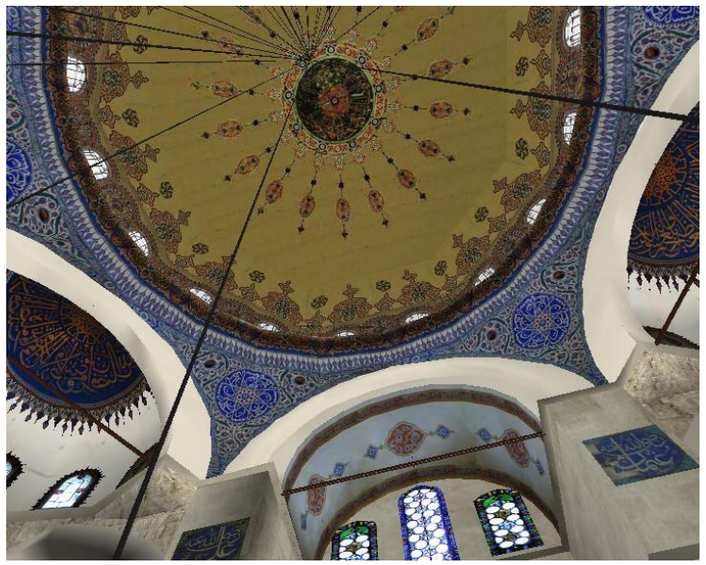
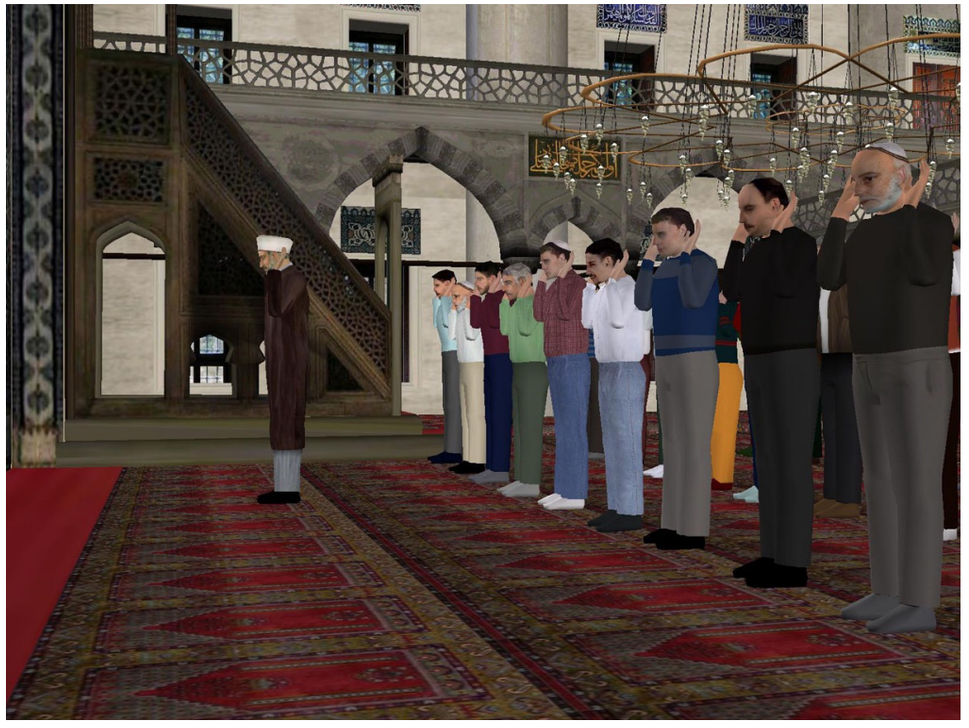
RV - VRlab - Cultural Heritage





http://vrlab.epfl.ch/research/CA_cultural_heritage.html

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DSC/BCC – Multimídia

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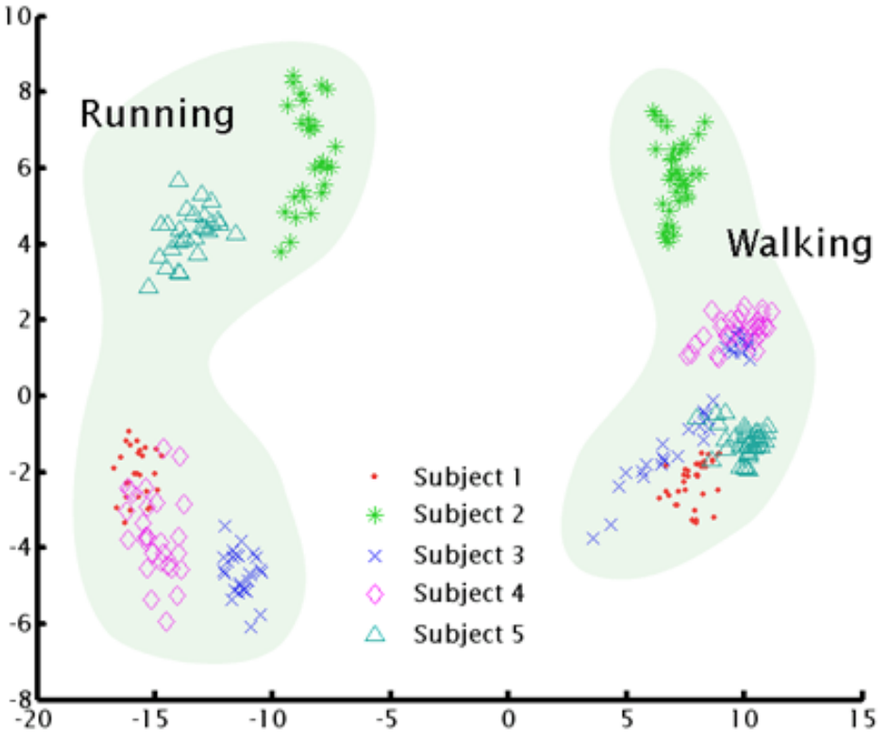
RV - VRlab - Versatile Locomotion Engine



http://vrlab.epfl.ch/research/LO_locomotin_engine.html

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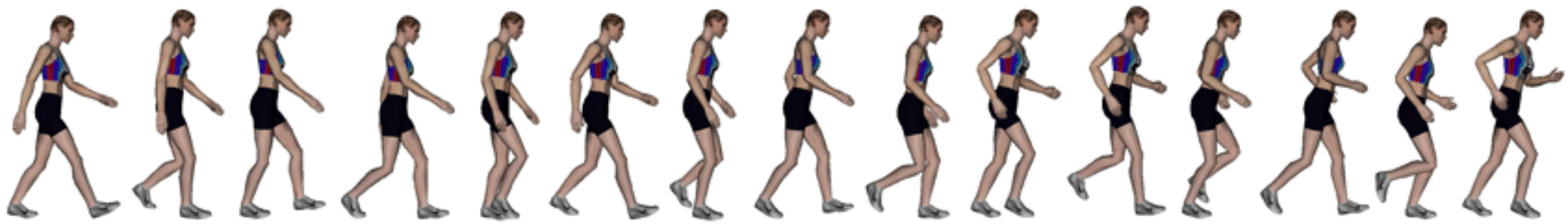
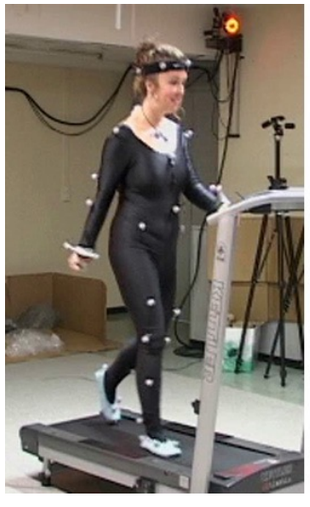
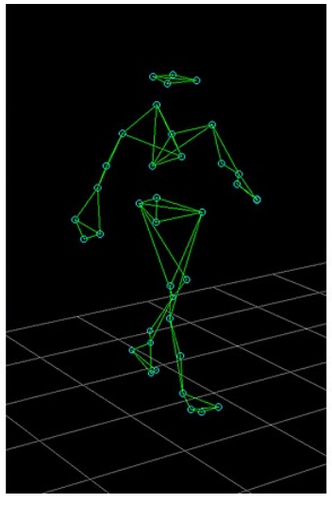
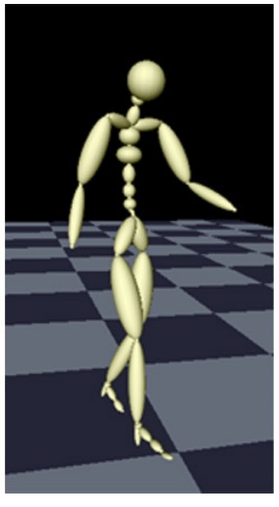
RV - VRlab - Versatile Locomotion Engine









http://vrlab.epfl.ch/research/LO_locomotin_engine.html

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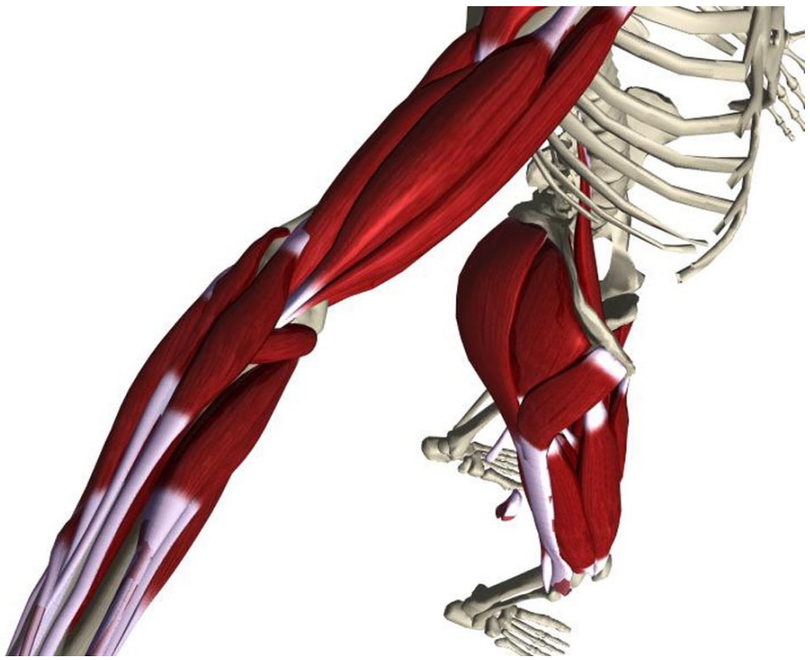
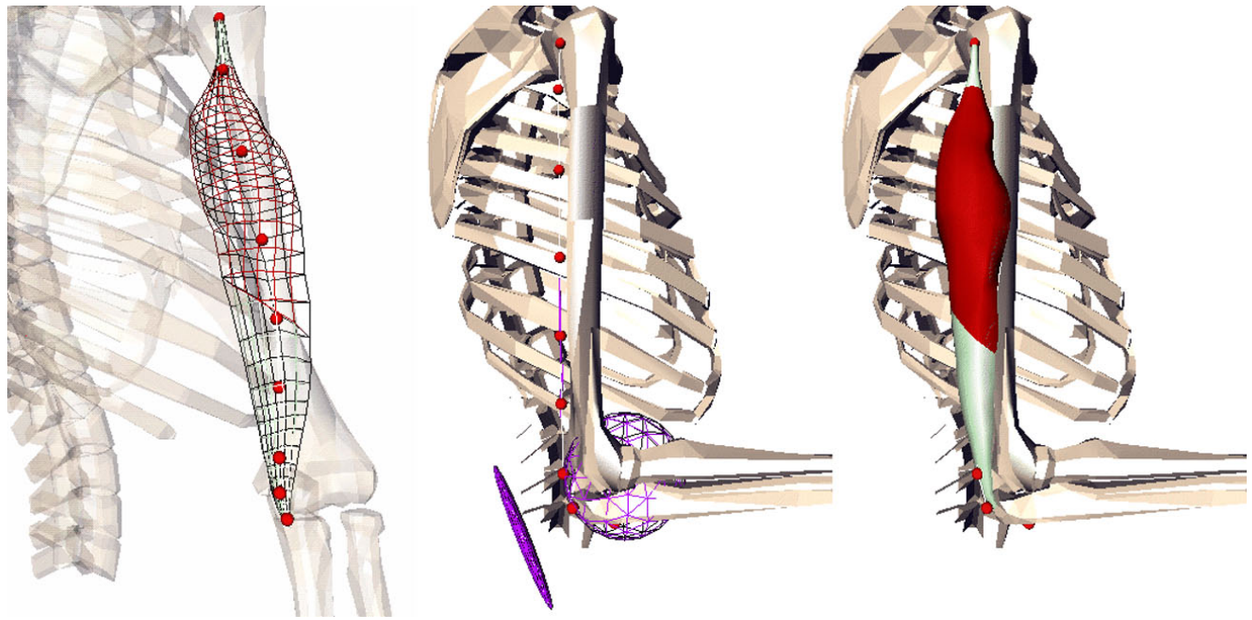
RV – VRlab - Muscle Builder





http://vrlab.epfl.ch/research/MB_muscle_builder.html

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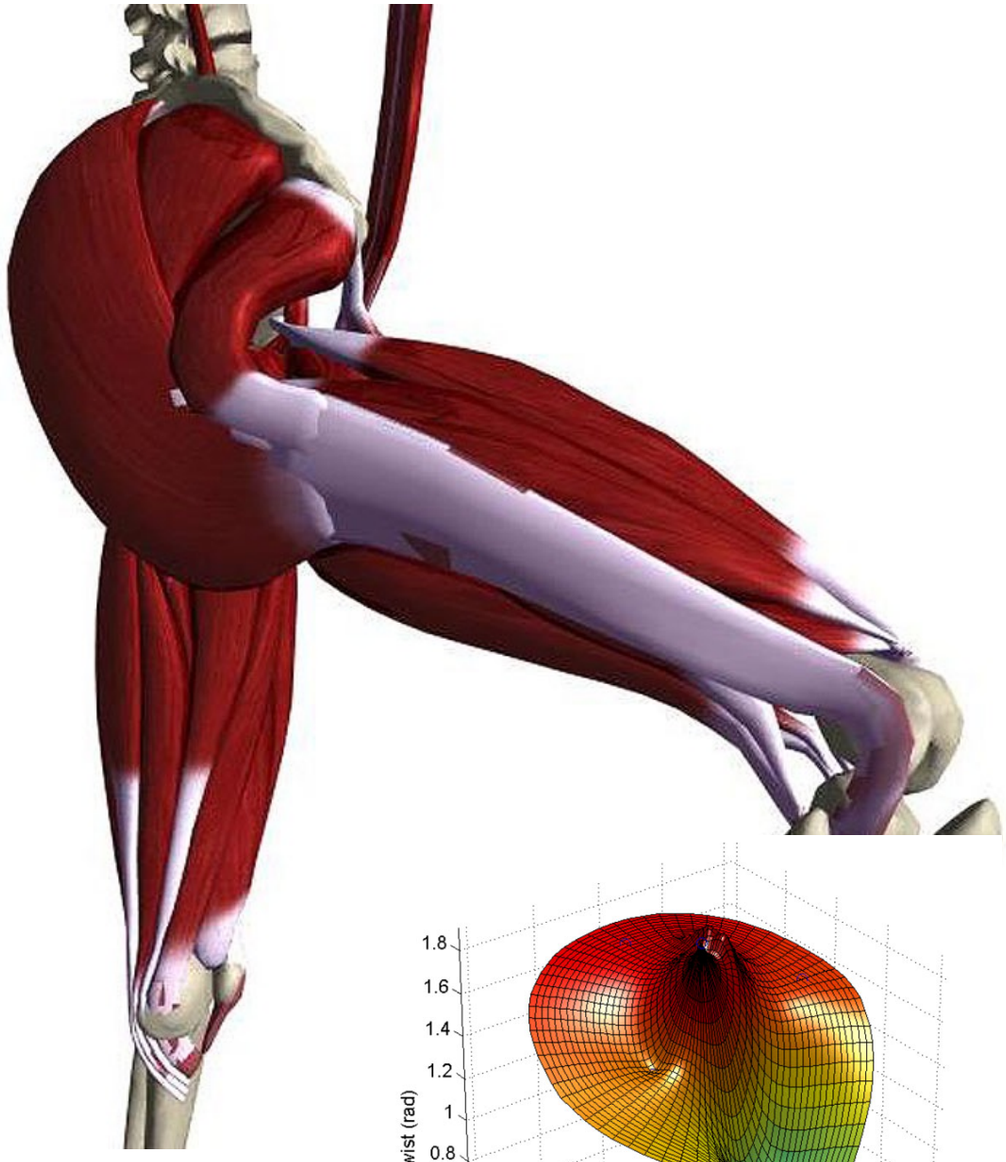
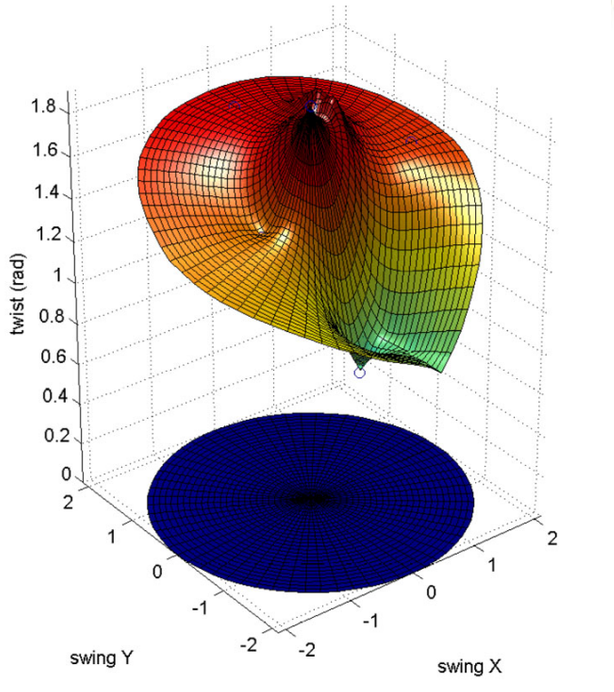
RV – VRlab - Muscle Builder





http://vrlab.epfl.ch/research/MB_muscle_builder.html

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RV – VRlab - Exposure for Cognitive and Behavioral Therapy

http://vrlab.epfl.ch/research/VRE_phobia.html

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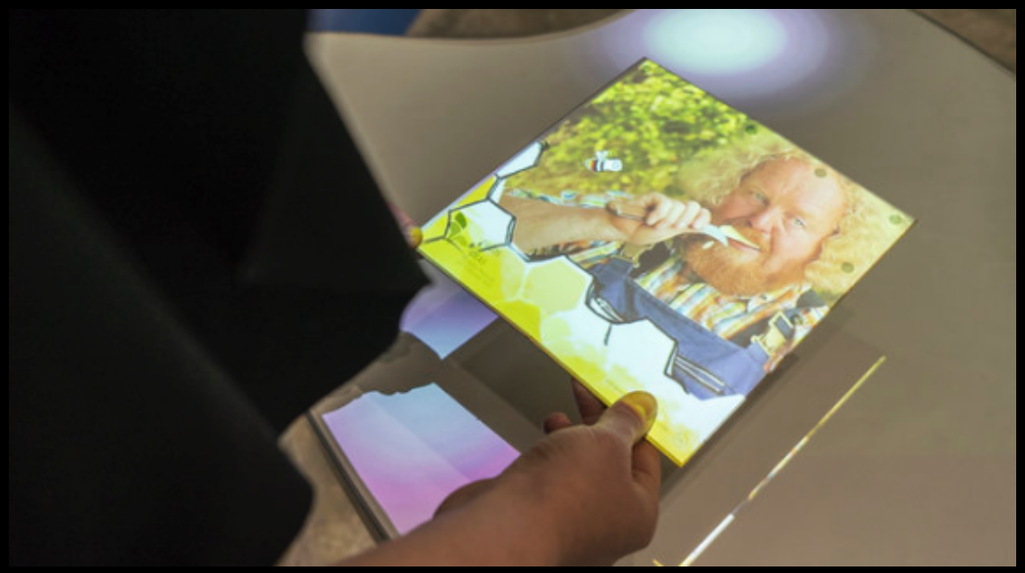
RA: Expo2015-germany (livro interativo)

https://expo2015-germany.de/en/exhibition/ambassador/sepp-braun?source=be-active

https://expo2015-germany.de/de/ausstellung/botschafter/
michael-schieferstein?source=be-active



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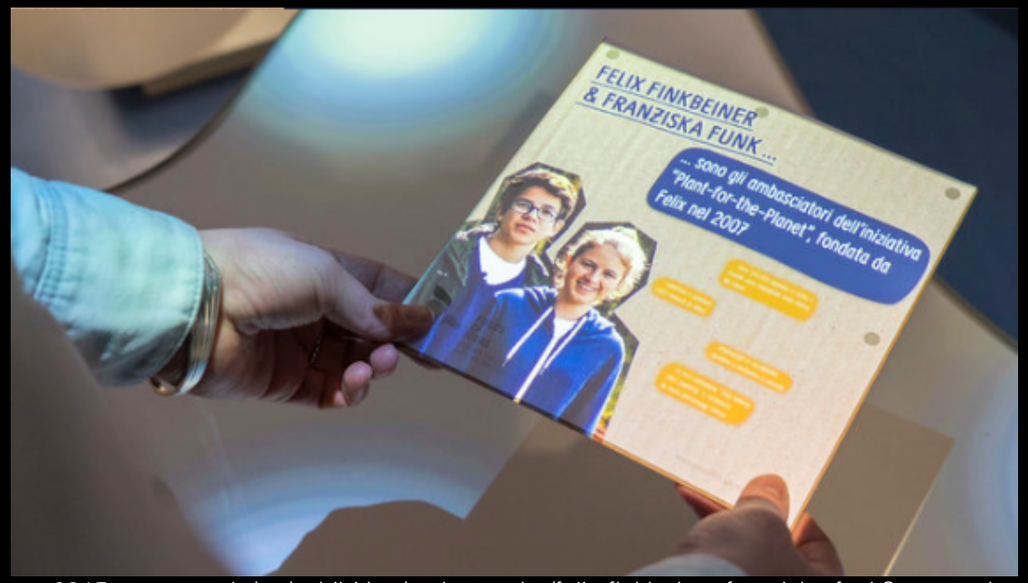
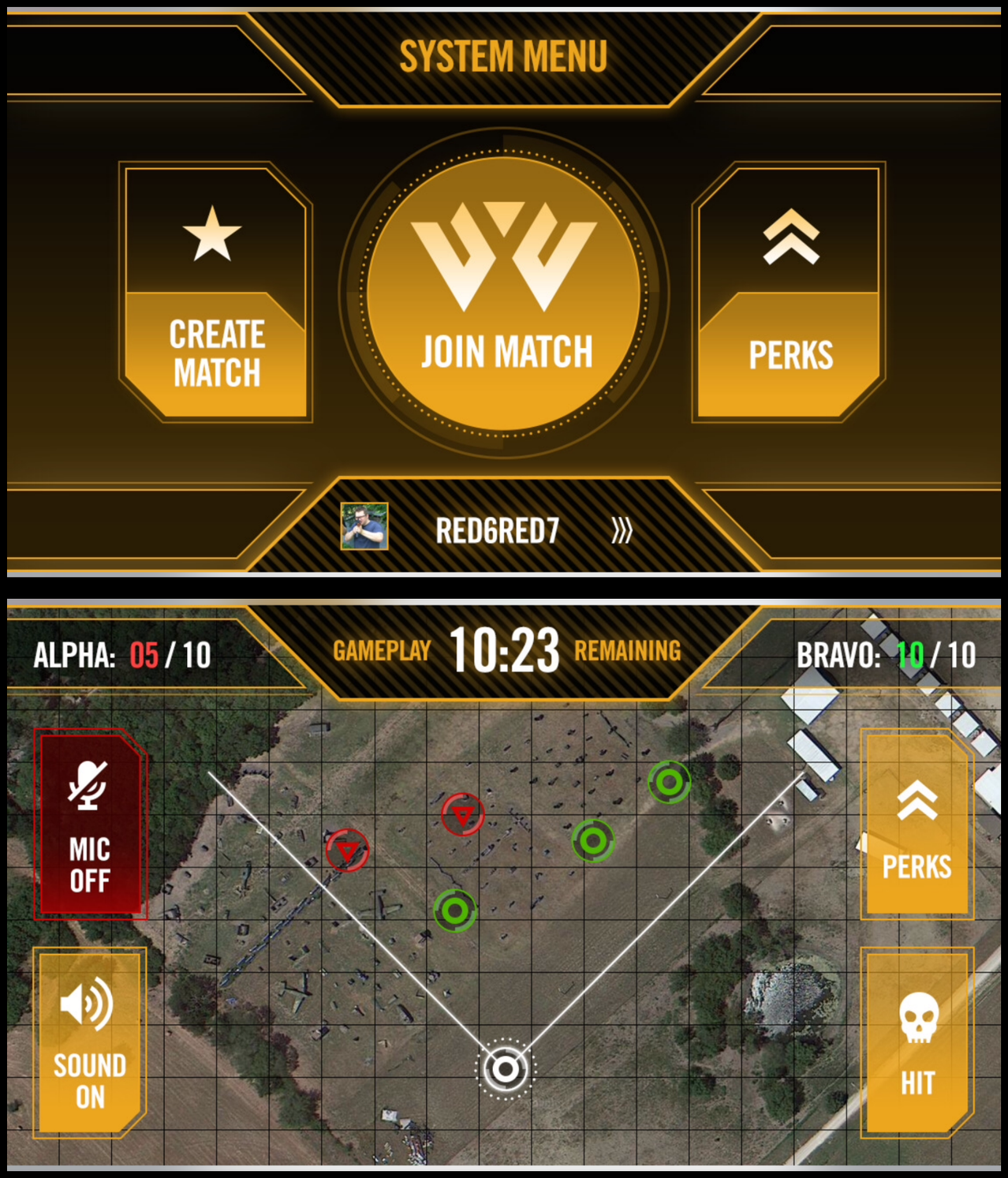
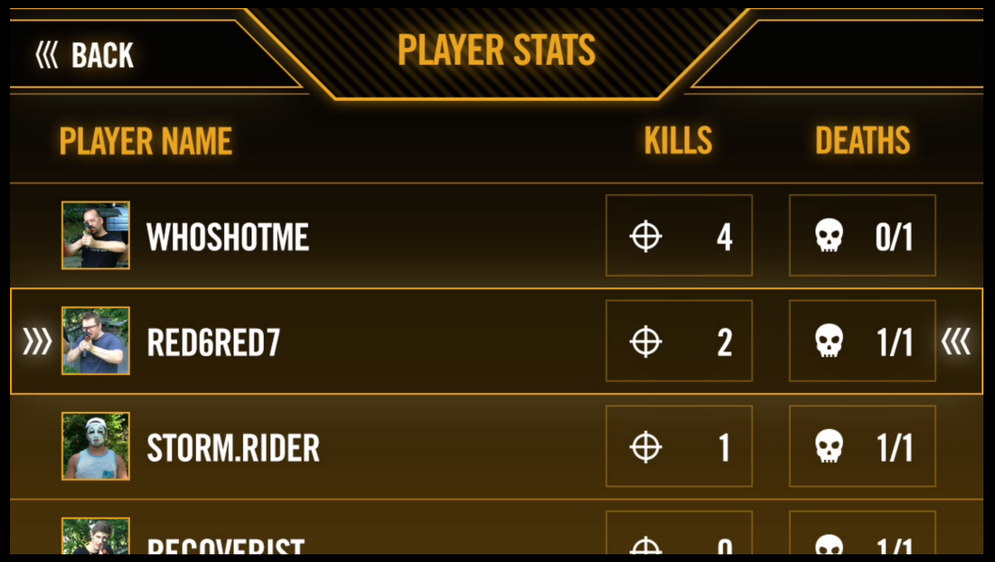


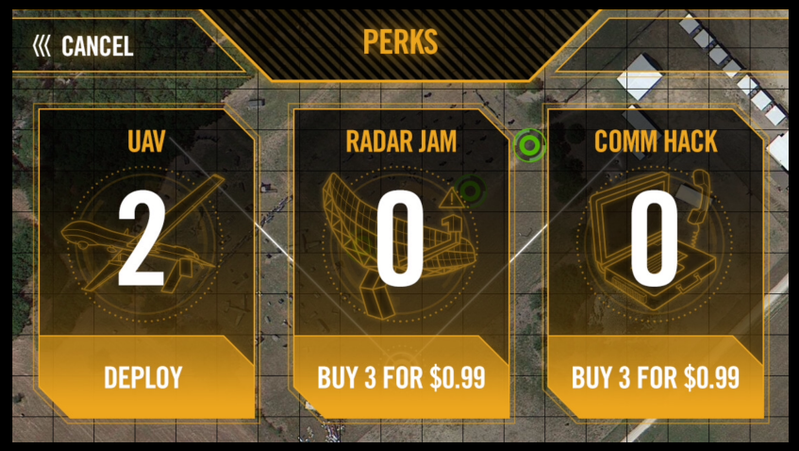
https://expo2015-germany.de/en/exhibition/ambassador/felix-finkbeiner-franziska-funk?source=be-active

RA: Overwatc - Innovis Labs (jogo interativo)



RA: Overwatc - Innovis Labs (jogo interativo)





Descrição

Overwatch is the next generation in interactive gaming; bringing the features of combat video games to real life airsoft, paintball, and laser tag matches. Track the location of teammates and opponents through GPS Radar, communicate with squad members at all times using Bluetooth-enabled voice chat, and utilize perks to gain an edge on your opposition. Perks include Radar Jam, Comm Hack, and more.

Buy an Overwatch tactical smartphone mount [rail mount/armband], join the Overwatch community, and get in on our gaming forums at OverwatchApp.com.
If you own/operate an airsoft, paintball, or lasertag facility, get in touch with us to discuss integrating Overwatch into your fields and arenas.

https://appsto.re/br/5m-AX.i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