

CIBC Workshop 2008



SCI Run Part 2: Fields and Vis

Fields: Mesh + Data

Geometry

Regular

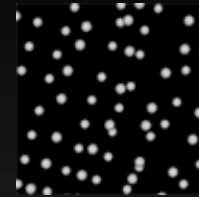
Irregular

Data

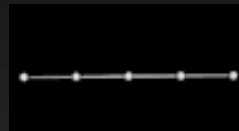
int, float, double, ...

Vector, Tensor, ...

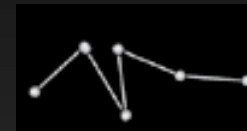
Data_at (center)



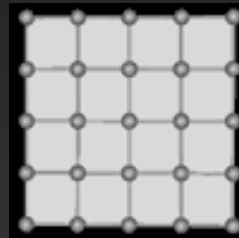
PointCloudField



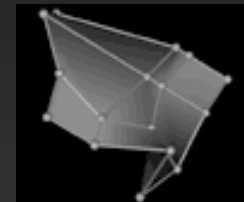
ScanlineField



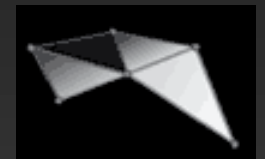
CurveField



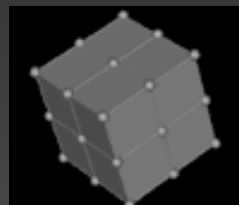
ImageField



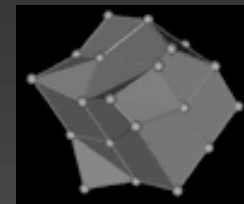
QuadSurfField



TriSurfField



LatVolField

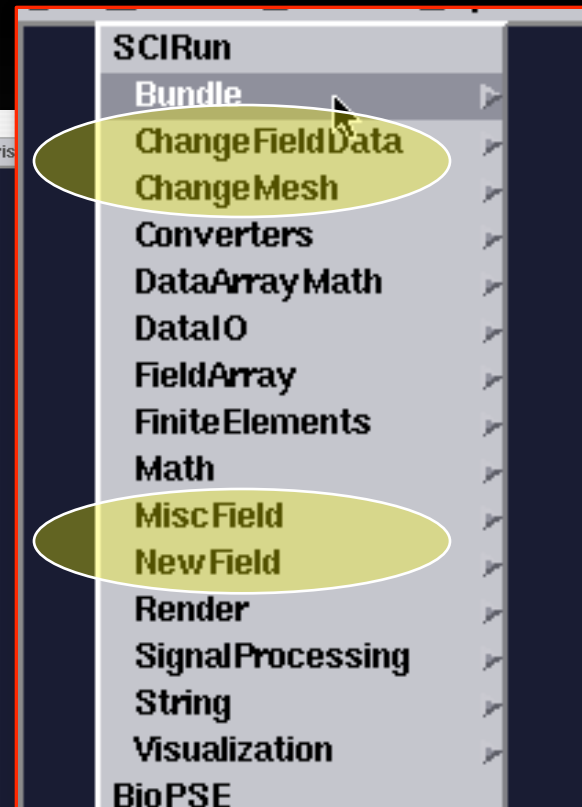
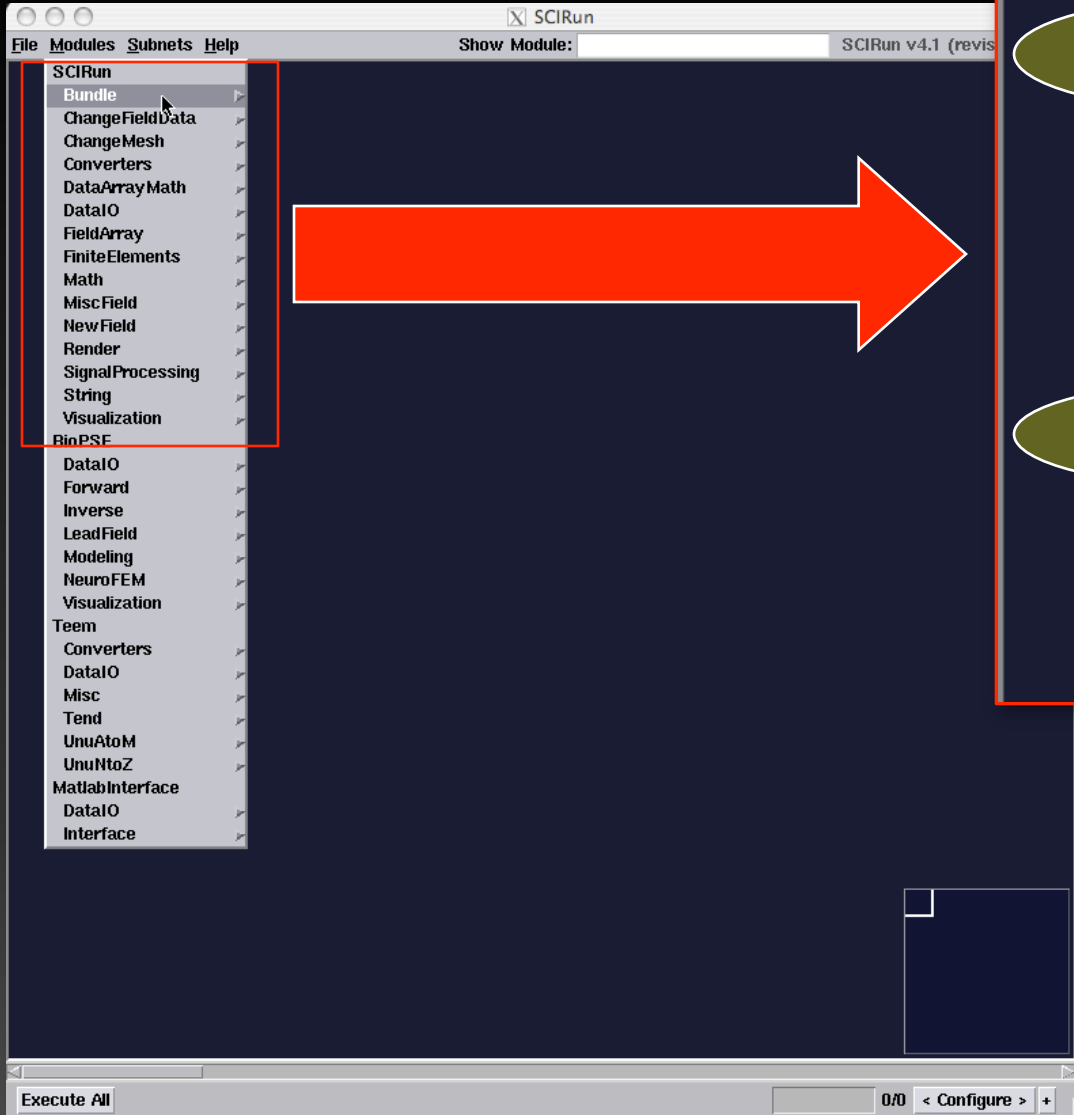


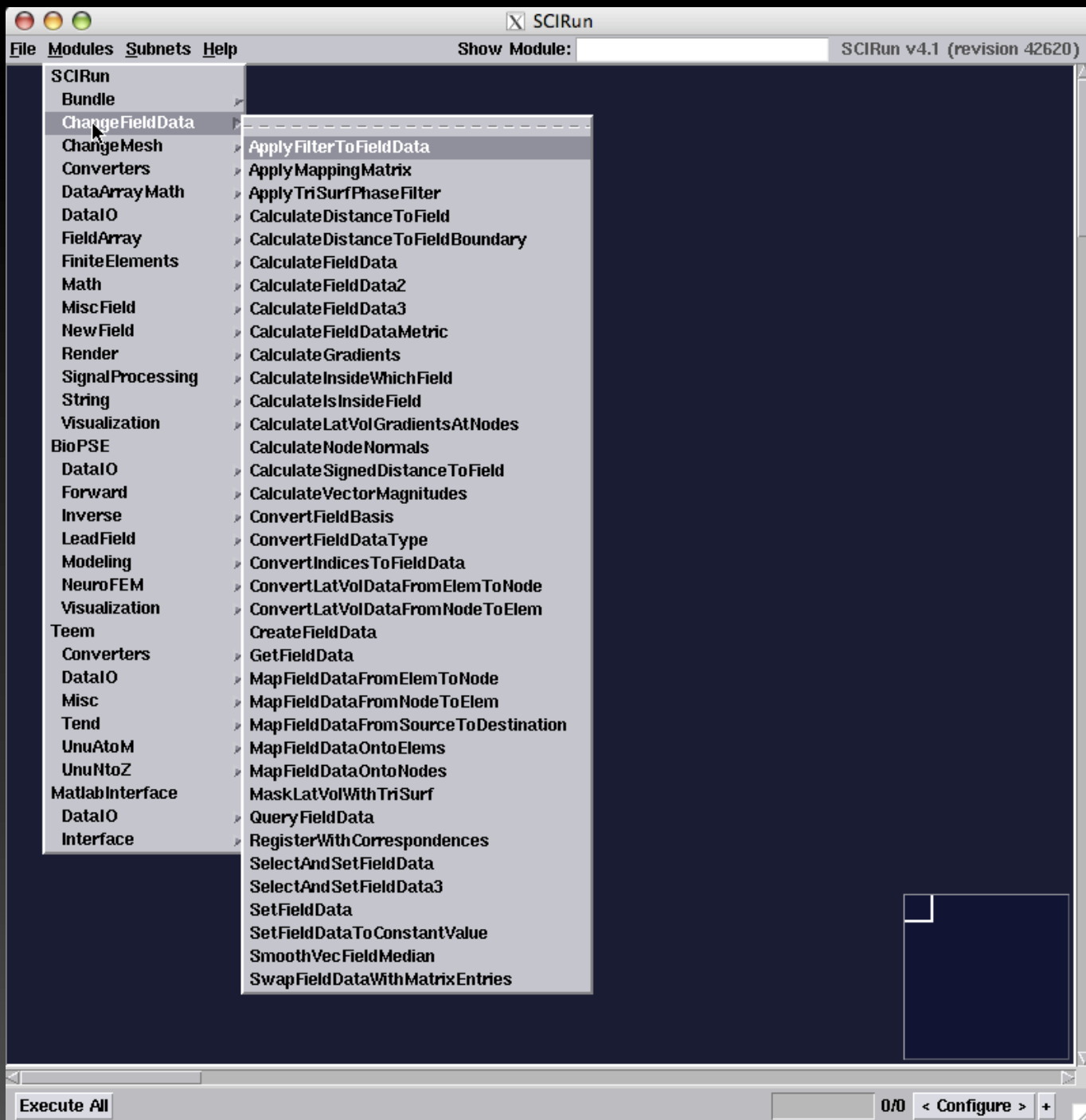
HexVolField

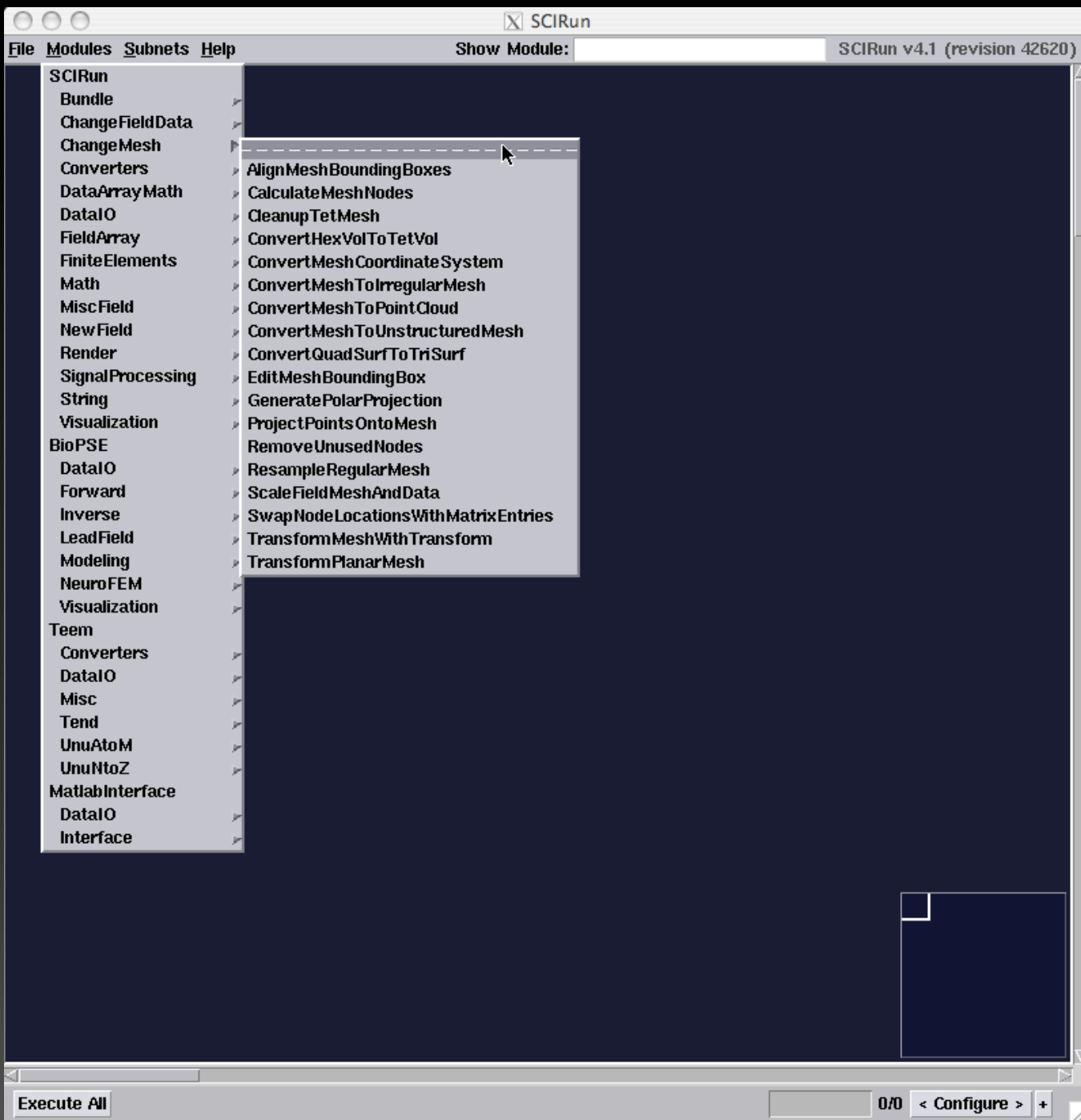


TetVolField

Field Categories







- SCIRun
- Bundle
- ChangeFieldData
- ChangeMesh
- Converters
- DataArrayMath
- DataIO
- FieldArray
- FiniteElements
- Math
- MiscField
- NewField
- Render
- SignalProcessing
- String
- Visualization
- BioPSE
- DataIO
- Forward
- Inverse
- LeadField
- Modeling
- NeuroFEM
- Visualization
- Teem
- Converters
- DataIO
- Misc
- Tend
- UnuAtoM
- UnuNtoZ
- MatlabInterface
- DataIO
- Interface

- ClipFieldByFunction
- ClipFieldByFunction2
- ClipFieldByFunction3
- ClipFieldByMesh
- ClipFieldToFieldOrWidget
- ClipFieldWithSeeds
- ClipLatVolByIndicesOrWidget
- ClipVolumeByIsovalue
- CollectFields
- ConvertMatricesToMesh
- CreateImage
- CreateLatVol
- CreateStructHex
- DecimateTriSurf
- ExtractIsosurfaceByFunction
- FairMesh
- GeneratePointSamplesFromField
- GeneratePointSamplesFromFieldOrWidget
- GenerateSinglePointProbeFromField
- GetAllSegmentationBoundaries
- GetCentroidsFromMesh
- GetDomainBoundary
- GetDomainStructure
- GetFieldBoundary
- GetSliceFromStructuredFieldByIndices
- InsertHexVolSheetAlongSurface
- InterfaceWithCubit
- JoinFields
- JointBilateralFilter
- MatchDomainLabels
- MergeFields
- MergeTriSurfs
- RefineMesh
- RemoveHexVolSheet
- SplitFieldByConnectedRegion
- SplitFieldByDomain

Execute All

0/0

< Configure > +

- SCIRun
- Bundle
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- ChangeMesh
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- DataIO
- FieldArray
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- Tend
- UnuAtoM
- UnuNtoZ
- MatlabInterface
- DataIO
- Interface

- BuildMappingMatrix
- BuildMatrixOfSurfaceNormals
- BuildPointCloudToLatVolMappingMatrix
- CalculateMeshCenter
- CalculateMeshConnector
- ChooseField
- CollectPointClouds
- CoregisterPointClouds
- GenerateLinearSegments
- GetMeshQualityField
- ManageFieldSeries
- ReportFieldGeometryMeasures
- ReportFieldInfo
- ReportScalarFieldStats
- SelectFieldROIWithBoxWidget
- SetFieldOrMeshStringProperty
- SetFieldProperty

SCIRun::Visualization::ShowField

ShowField_0

Field Name Override

Display Options

Nodes | Edges | Faces | Text

Show Nodes
 Enable Transparency

Node Coloring

Default
 Colormap Lookup
 Conversion to RGB

Node Display Type

Points
 Spheres

Sphere Scale

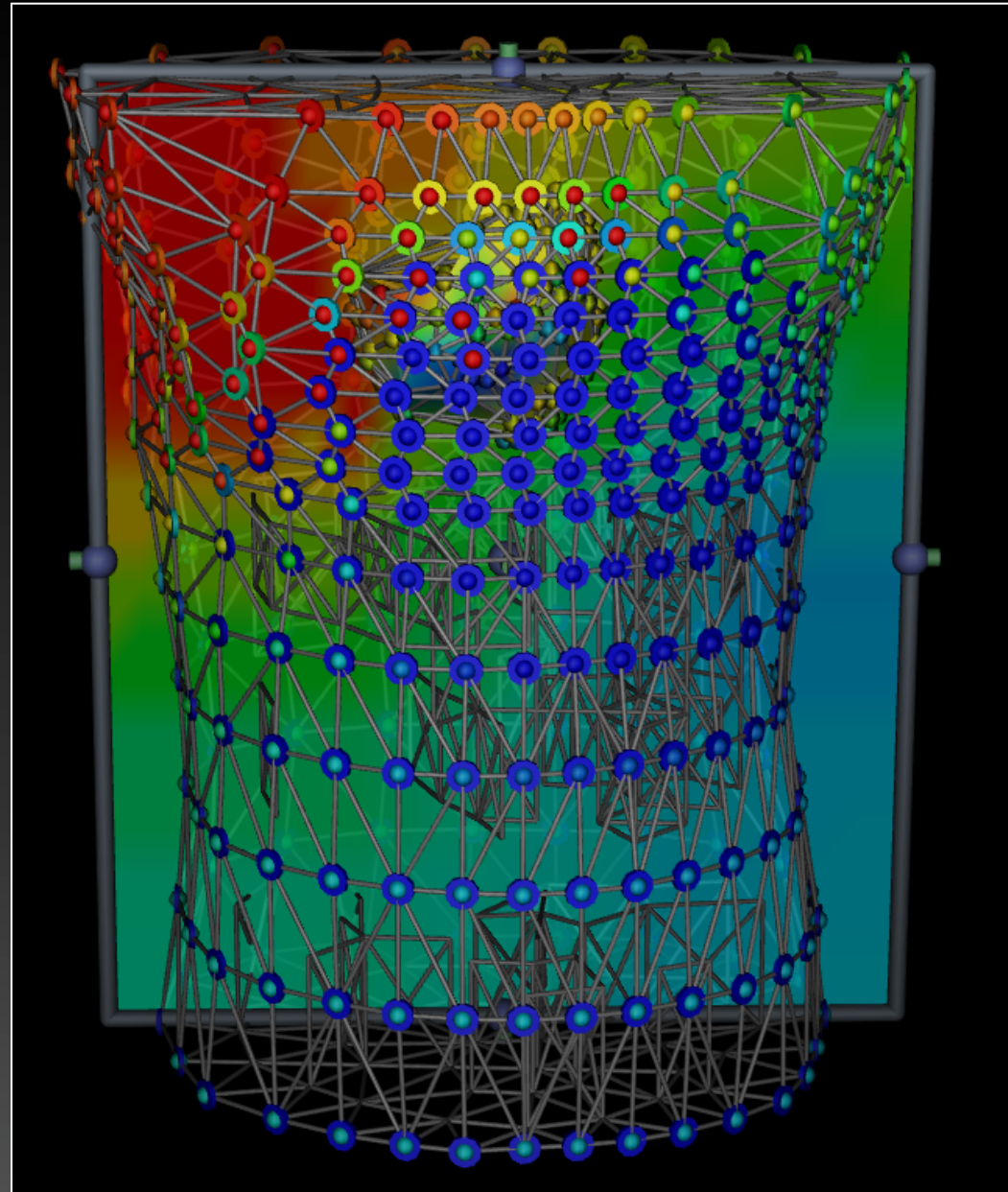
Resolution

Default Color Use Default Size
PWL Approx Div:

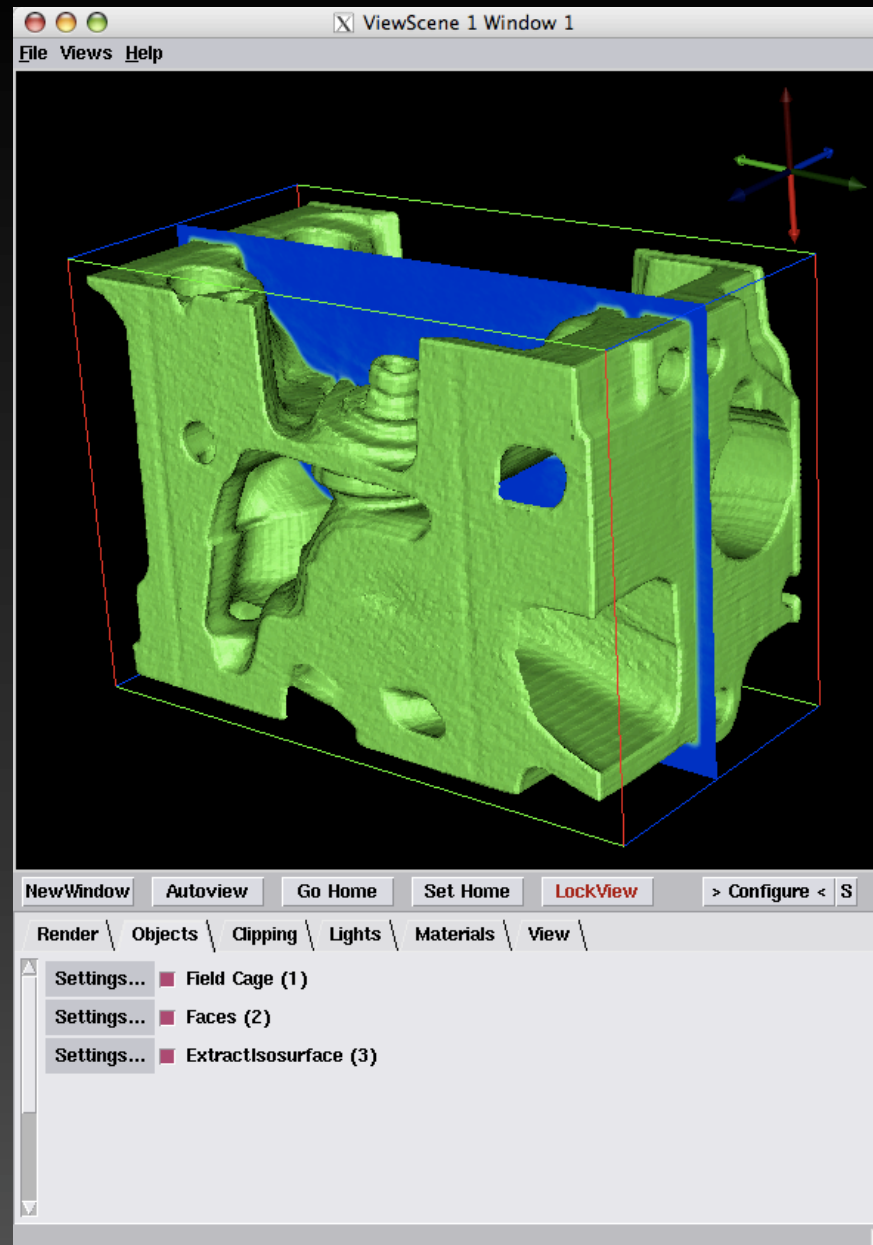
Execute Policy

Interactively update
 Execute button only

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SCIRun::Render::ViewScene



Lab 3 (part 2)

