C2I

Group 2

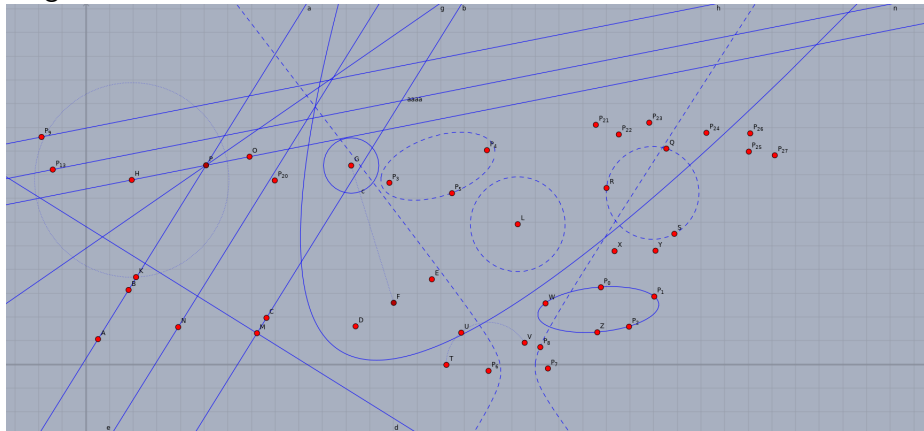Universität Leipzig

17.05.2018

Clone JSXGraph-Project from git:

```
git clone https://github.com/jsxgraph/jsxgraph
```

Patch the file jsxgraph/src/reader/cinderella.js
(cinderella.patch in Folder CinderellaReaderPatch)

```
patch < cinderella.patch
```
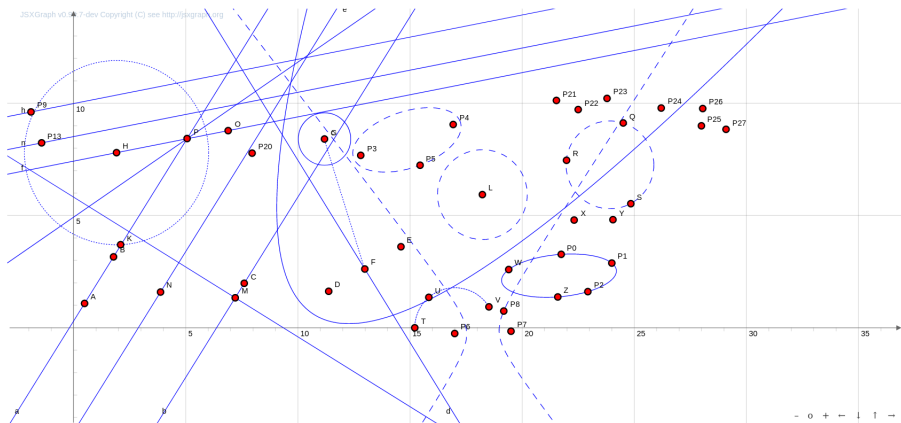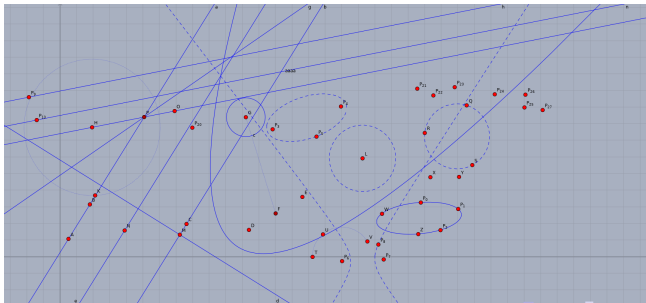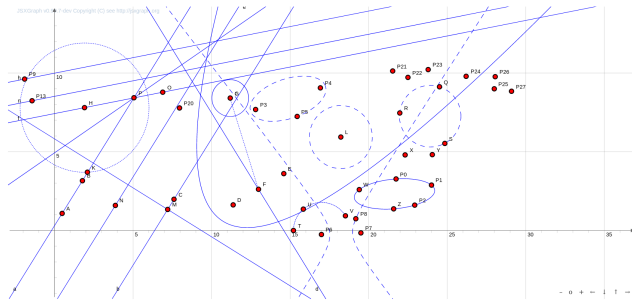
Original CDY-Board

Load CDY Board from file

Test with `JXG.JSXGraph.loadBoardFromFile`

Load Cinderella Board From File

Load Cinderella Board From File

Load CDY Board from file

Cinderella Elements can be loaded with JSXGraph

Cinderella Element	Loadable with JSXGraph	Notice
FreePoint	✓	free point
Join	✓	line
Segment	✓	segment
CircleMP	✓	circle, defined by two points
CircleByFixedRadius	✓	circle, defined by point and fixed radius
CircleByRadius	✓	circle, defined by point and radius
PointOnCircle	✓	glider on a circle
PointOnLine	✓	glider on a line
Mid	✓	mid point
CircleBy3	✓	circumcircle
Parallel	✓	parallel
Orthogonal	✓	normal
ConicBy5	✓	conic defined by five points
ConicFoci	✓	ellipse with foci and points on the conic
ConicFociH	✓	hyberbola with foci and points on the conic
ConicParabolaPL	✓	parabola with focus and directrix
Poly	✓	polygon
Arc	✓	arc
Through	✓	line defined by one point
Compass	✓	circle defined by compass
AngularBisector	✓	angular bisector
Meet	✓	intersect two lines
IntersectionConicLine	✓	intersection circle/line
IntersectionCircleCircle	✓	intersection circle/circle
LineByFixedAngle	✗	line by fixed angle

Convert CDY to I2G
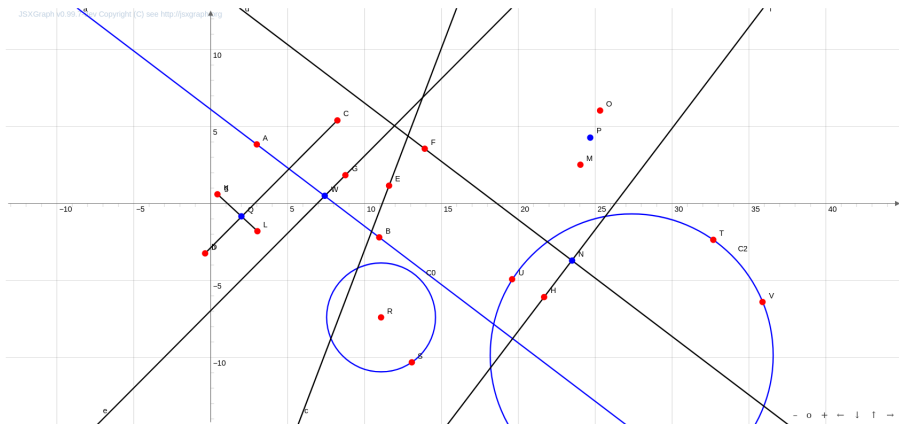
Usage:

```
java C2I <path to cinderella file> <path to intergeo file>
```

Convert CDY to I2G

Test with `JXG.JSXGraph.loadBoardFromFile` (CDY Format)
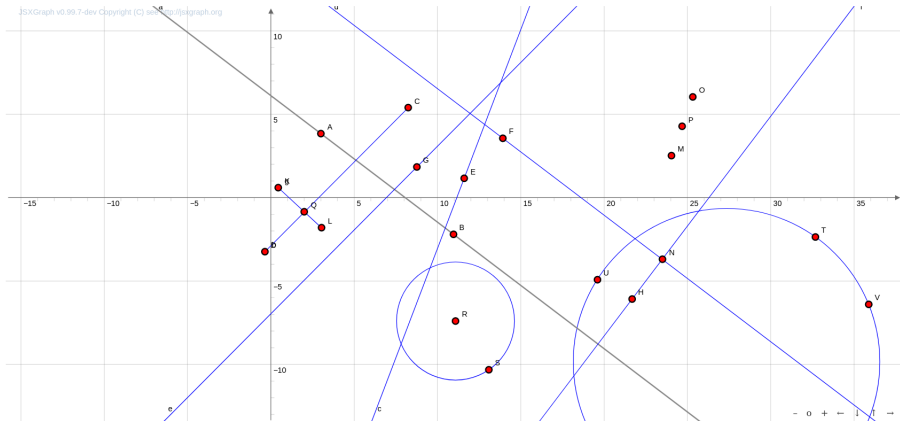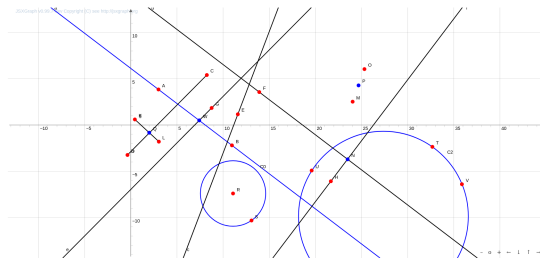
Load Intergeo Board From File

Convert CDY to I2G

Test with `JXG.JSXGraph.loadBoardFromFile` (I2G Format)
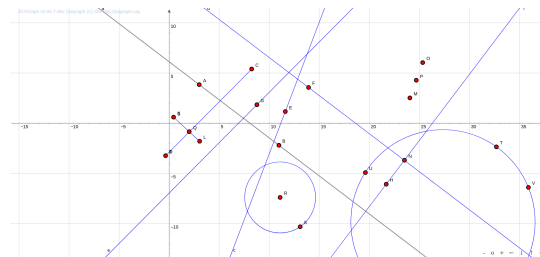
Load Cinderella Board From File

Convert CDY to I2G

Load Intergeo Board From File

Load Cinderella Board From File

Convert CDY to I2G

Transformation Status:

Cinderella Element	Convertible	Corresponding Intergeo Element
FreePoint	✓	free_point
Meet	✓	point_intersection_of_two_lines
Mid	✓	midpoint_of_two_points
Join	✓	line_through_two_points
Segment	✓	line_segment_by_points
Through	✓	line
Parallel	✓	line_parallel_to_line_through_point
Orthogonal	✓	line_perpendicular_to_line_through_point
AngularBisector	✓	line_angular_bisectors_of_two_lines
CircleMP	✓	circle_by_center_and_point
CircleBy3	✓	circle_by_three_points
Other Elements	✗	
Elements Attributes	✗	