Models at the Department of Mathematical Sciences, University of Copenhagen

Inventory recorded by Jesper Lützen 2019

The series and numbers of the Schilling models (Schill) refer to the 1911 Catalogue. The Placement refers to the showcases in the Library of the Department of Mathematical Sciences. First letter indicates the left, middle or right showcase, the second letter indicates the upper or lower shelf). The numbered boxes are placed in the Archive of the Department.

Quartic surfaces:

Maker	Series, number	Number In 2. Teil	Description	Comment	Placement Showcase, shelf
Schill	3, 4	179	Ellipsoid with lines of curvature		M, L
Schill	16, 9	185	Confocal ellipsoid, hyperboloid of one sheet and hyp. Of two sheets	Same as DTU ?	M, L
Schill	1, 5	214	Ellipsoid with geodesics through the “Nebelpunkte”		M, L
Schill	5, 7a	215	Ellipsoid of rotation with geodesics		M, L
Schill	5, 7b	217	Spheroid with geodesics		M, L
Schill	Side 1		Kartonmodelle von Flächen zweiter Ordnung		Box 5

Surfaces with constant Gauss curvature

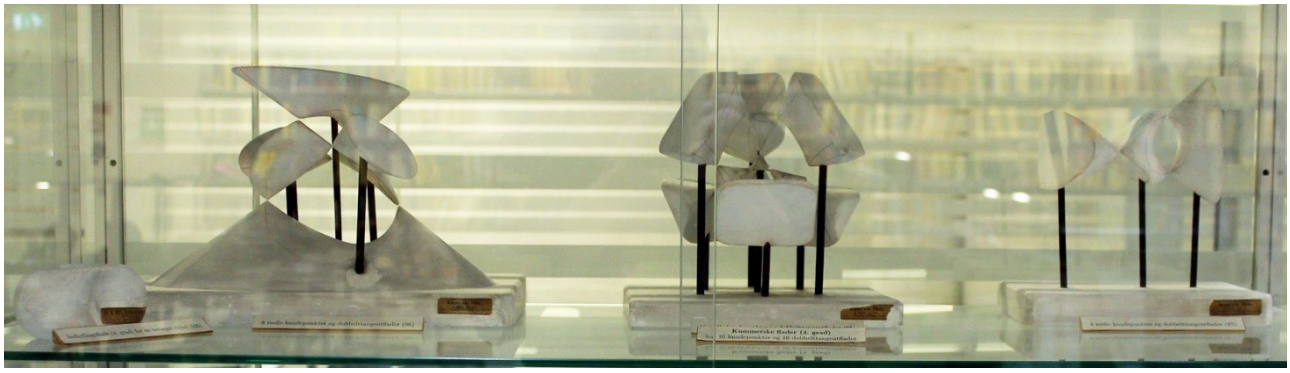
Maker	Series, number	Number In 2. Teil	Description	Comment	Placement Showcase, shelf
Schill	5, 2b	220	Surf of rotation of const pos. curv.		M, U
Schill	5, 2c	221	Surf og rot. Const pos curvat "Wulsttypus"		M, U
Schill	5, 3	225	Schraubefläche with const neg. curvature		M, U
Schill	2, 4	228	Rotationsfläche const pos. curvature	The lable has (ser 5,4) but it is clearly false	M, U
Schill	5, 4	231	Schraubefläche const neg. curvature		M, U
Schill	2, 5	229	Rotationsfläche const. neg. curv. "Kegeltypus"		M, L
?			Rotated tractrix in led with lines of curvature		M, L

Surfaces with constant mean curvature

Maker	Series, number	Number In 2. Teil	Description	Comment	Placement Showcase, shelf
Schill	2, 3a	239	Onduloide		R, L
Schill	7, 6c	242	Catenoid		R, L
Schill	17, 4	247	Catalan'sche Minimalfläche		Box 1

Cubic surfaces

Maker	Series, number	Number In 2. Teil	Description	Comment	Placement Showcase, shelf
Schill	7, 2	45	4 real conic points		R, L
Schill	7, 12	55	1 knot		R, L
Schill	7, 16	59	1 knot		R, L
Schill	7, 13	56	1 knot		R, L



Fourth degree surfaces

Maker	Series, number	Number In 2. Teil	Description	Comment	Placement Showcase, shelf
Schill	2, 1a	95	Kummer surface		R, U
Schill	2, 1b	96	Kummer Surface		R, U
Schill	2, 1c	97	Kummer surface		R, U
Schill	5, 5c	89	Spindelcyclide (Dupin)		R, L
Schill	5, 5d	90	Parabolische Hornciclide (Dupin)		R, L
Schill	9, 3	100	Steiner's Römische Fläche		R, L
Schill	10, 4	105	Böhmisches Gewölbe		R, U

Kinematic models

Maker	Series, number	Number In 2. Teil	Description	Comment	Placement Showcase, shelf
Schill	2, 6	325	Bahnkurve eines schweren punktes auf der Kugel		L, L
Schill	5, 6	324	Kettenlinie auf der Kugel		L, L

Other Models with known maker and known motive

Maker	Series, number	Number In 2. Teil	Description	Comment	Placement Showcase, shelf
Schill	30, 1	298	Projective Ebenemit nur 3 Exteremen		L, L
Hjelmslev			Metal model of third order piecewise plane surface with three straight lines. "Til C. Juel fra J. Hjelmslev, 25. Jan. 1925"	Projective plane?	L, L
Schill	10, 11	194-195	Versuchsobject		Box 3

Mechanical models

Maker	Series, number	Number In 2. Teil	Description	Comment	Placement Showcase, shelf
Schill	24, 8	347	Gleichläufiges und gegenläufiges Zwilingskurbelgetriebe	Sum of dist to foci is constant in an ellipse	Box 2
Schill	29, 1-3	326-328	Possibly part of mechanism		Box 2
Schill	31, 40	340	Cycloidenverzahnung		Box 3
Schill	24, 1	329	Epitrochoiden		

Other models with unknown maker and/or motive

Maker	Series, number	Number In 2. Teil	Description	Comment	Placement Showcase, shelf
?			Plaster model of a surface		L, U
?			Plaster model of a surface		L, U
?			Plaster model of a surface		L, U
?			String model. A curve and its tangents. Illustrates probably one of the 8 types of singularity	Related to the string models in Box 5 and 6 in archive	L, U
Schill?			Broken plaster surface		Box 6
?			Juel's Pyramide. 3D puzzle, 18+3+1 blocks. Can be collected to a pyramide and a prism	Wood	Box1
			A lincage		Box 1
			Wire curves probably for soap films		Box 1 + 2
			Topological game with bear opener and strings		Box 1
			Regular polyhedral in cardboard		Box 2
			Planes in sphere (cardboard and wire models. broken		Box 2
			Wooden puzzle: Equilateral triangle equipartitioned in a square		Box 3
			10 large wooden blocks with normal wedges and normal corners. Illustrations to Hjelmslev's Textbook: "Elementær Geometri"		Box 3
			Large string model		Box 4
			5 String models, singularities of curves?		Box 5+6
			Wooden model of three cones pointing toward each other. Two and two they share a generator		Box 6