PID	Cluster ID	Mnemonic	Paper ID	Title	Year
	C24	ModelDeltas	S7	Delta-driven collaborative modeling	2018
P01			S5	Collaborative Modeling Empowered By Modeling Deltas	2015
			S6	Collaborative Modeling Enabled By Version Control	2018
P02	C28	Aydemir	S55	Supporting Collaborative Modeling via Natural Language Processing	2020
DU3	C11	FLAME	S13	Continuous analysis of collaborative design	2017
F03			S57	Collaborative-Design Conflicts: Costs and Solutions	2018
	C6	GDM	S61	A Formalization of Group Decision Making in Multi-viewpoints Design	2020
P04			S59	Collaborative model-based matching of heterogeneous models	2018
			S60	A collaborative decision approach for alignment of heterogeneous models	2019
P05	C8	AToMPM	S23	Evaluating the Cloud Architecture of AToMPM	2016
	C22	MONDO	S26	Scalable modeling technologies in the wild: an experience report on wind turbines control applications development	2020
			S47	Query-based Access Control for Secure Collaborative Modeling using Bidirectional Transformations	2016
P06			S3	Property-based locking in collaborative modeling	2017
			S69	The MONDO collaboration framework: secure collaborative modeling over existing version control systems	2017
			S19	Enforcing fine-grained access control for secure collaborative modelling using bidirectional transformations	2019
P07	C3	SerVCS	S15	SerVCS: Serialization Agnostic Ontology Development in Distributed Settings	2016
P08	C27	Blockchains	S43	Decentralized Business Process Modeling and Instance Tracking Secured By a Blockchain	2018
FU0			S53	Knowledge Blockchains: Applying Blockchain Technologies to Enterprise Modeling	2018
P09	C29	Horvath	S56	Towards the Next Generation of Reactive Model Transformations on Low-Code Platforms: Three Research Lines	2020
P10	C4	Collaboro	S17	Collaboro: a collaborative (meta) modeling tool	2016
P11	C13	Stigmergic	S30	A Collaborative Conceptual Modeling Tool Based on Stigmergy Mechanism	2016
P12	C14	TouchCORE	S2	Towards Online Collaborative Multi-view Modelling	2018
D13	C25	MetaEdit+	S48	Collaborative Modelling with Version Control	2017
r 13			S49	Collaborative Creation and Versioning of Modeling Languages with MetaEdit+	2018
	C21	WebGME	S46	MiW: A domain specific modeling environment for complex molecular systems	2017
D11			S45	Modelica on the Web	2019
P14			S40	DesignBIP: A Design Studio for Modeling and Generating Systems with BIP	2018
			S41	A Common Integrated Framework for Heterogeneous Modeling Services	2018
P15	C15	CollaborativeCTT	S27	Collaborative Task Modelling on the Web	2016
P16	C16	TestMEReq	S35	An Automated Collaborative Requirements Engineering Tool for Better Validation of Requirements	2016
P17	C30	Neto	S65	Supporting collaborative modelling in UML class diagrams	2019

	C23		S20	Near real-time collaborative modeling for view-based Web information systems engineering	2018
			S70	Engineering Web Applications Using Real-Time Collaborative Modeling	2017
		Yjs/SyncMeta	S63	Collaborative wireframing for model-driven web engineering	2020
P18			S64	Integrating Web-Based Collaborative Live Editing and Wireframing into a Model-Driven Web Engineering Process	2020
			S21	Near Real-Time Collaborative Conceptual Modeling on the Web	2015
			S66	Near real-time peer-to-peer shared editing on extensible data types	2016
			S67	View-Based Near Real-Time Collaborative Modeling for Information Systems Engineering	2016
P19	C1	CrowdUI	S38	CrowdUI: Supporting Web Design with the Crowd	2020
P20	C17	Articulation	S54	Articulation of work process models for organizational alignment and informed information system design	2016
P21	C9	Crosside	S68	Sketching by cross-surface collaboration	2019
	C26	Chatbots	S16	Collaborative Modeling and Group Decision Making Using Chatbots in Social Networks	2018
			S18	The Rise of the (Modelling) Bots: Towards Assisted Modelling via Social Networks	2017
P22			S62	Assisted Modelling Over Social Networks with SOCIO	2017
			S51	Towards Conversational Syntax for Domain-Specific Languages using Chatbots	2019
			S52	Collaborative Modelling: Chatbots or On-Line Tools? An Experimental Study	2020
P23	C18	Sunye	S29	Model Consistency for Distributed Collaborative Modeling	2017
P24	C2	Modelshare	S25	Unifying Model-and Screen Sharing	2018
P25	C19	Trols	S14	Multifaceted Consistency Checking of Collaborative Engineering Artifacts	2019
P26	C10	ActiveDSLs	S22	Active Domain-Specific Languages: making every mobile user a modeller	2017
P27	C12	CMSPEM	S24	An Approach to Define and Apply Collaboration Process Patterns for Software Development	2015
P28	C20	FlexiSketch	S32	FlexiSketch: a lightweight sketching and metamodeling approach for end-users	2019
P20	C5	Zerrouk	S9	Managing model conflicts in collaborative modeling using Constraint Programming	2018
1 23			S10	Collaborative Modelling: An MDE-Oriented Process to manage large-scale models	2017