

Authors' Biographies

Antonio Camurri (born in Genoa in 1959; 1984 Master's Degree in Electric Engineering; 1991 PhD in Computer Engineering) is Associate Professor at the DIST University of Genoa (Faculty of Engineering), where he teaches Software Engineering and Multimedia Systems. His research interests include computer music, multimodal intelligent interfaces, interactive systems, kansei information processing and artificial emotions, interactive multimodal-multimedia systems for theatre, music, dance, and museums. He is founder and Scientific Director of the InfoMus Lab at the DIST University of Genoa (www.infomus.org). He was President of AIMI (Italian Association for Musical Informatics), is member of the Executive Committee (ExCom) of the IEEE CS Technical Committee on Computer Generated Music, Associate Editor of the international "Journal of New Music Research". He is in charge of EU IST Projects at DIST InfoMus Lab of the University of Genoa. He is the author of more than 80 international scientific publications. Since 2005 he has been Director of the Casa Paganini International Centre of Excellence for science and multimedia technologies for music and performing arts (www.casapaganini.org).

Hans H. Diebner has been head of the project "Basic Research into Performative Science" at the Institute for New Media, Frankfurt am Main since January 2006. He studied Physics in Tübingen, graduated in 1994 with a Diploma Thesis on exactly reversible molecular dynamics simulations and received his PhD in 1999 with a Doctoral Thesis on "Time-dependent deterministic entropies and dissipative structures in exactly-reversible Newtonian molecular-dynamics universes." Diebner's research is a continuation of endophysics, a notion coined by his supervisor, the eminent chaos researcher Otto E. RöSSLer. The annulment of the object-subject distinction in endophysics is emphasised in performative science by adding corporeality to the methodological canon of science. From 1999 until 2005 Diebner headed the Institute for Basic Research at the Centre of Art and Media in Karlsruhe, where he worked on the concept of performative science and collaborated in numerous projects with artists as well as scientists from different disciplines. He feels at home both in general system theory and in the arts. The achievements of the ZKM period have been published in 2006 by Springer-Verlag Vienna, entitled "Performative Science and Beyond – Involving the Process in Research." Besides his scientific practice he is deeply committed in education, and endeavours to establish performative science as an interdisciplinary area of studies.

Monika Fleischmann is a German media artist and scientist and Hon. Professor for Media Art and Theory of the University of Applied Sciences, Bremen. Since 1997 she has been head of Media Arts & Research Studies at the MARS – Exploratory Media Lab at the Fraunhofer Institute IAIS. Her main research topic is to extend the concept of communication through interaction and participation on the base of perceptive processes. She has published more than 100 scientific papers, artistic essays and theoretical articles. In 1987 she co-founded Art+Com in Berlin with artists, architects and computer scientists. Since then she has produced a large number of media art and design objects in cooperation with her partner Wolfgang Strauss. In co-operation with her partner she has received 22 awards (June 2008). Her important works of art include “Home of the Brain” (1992) (first artistic HMD - VR Installation), “Liquid Views” (1992-93) – Narcissus’ mirror and “netzspannung.org – performing the archive” (2006).

Stefan Göllner studied Landscape Architecture at the Technical University Berlin (1997-2000) and Communications Design at the Düsseldorf University of Applied Sciences (2000-2006). Since February 2007 he has been working at the Academy of Media Arts Cologne (KHM) in the EU-funded research project “Citizen Media”. His focus in the project is on civic media in local communities and the development of a map-based platform for participatory urban development (“Unortkataster Köln”).

Suguru Goto is a composer/performer, an inventor and a multimedia artist, and he is considered one of the most innovative of and the mouthpiece of a new generation of Japanese artists. He is highly connected to technical experimentation in the artistic field and to the extension of the existing potentialities in the man-machine relation. In his works the new technologies mix in interactive installations and experimental performances, he is the one who invented the so-called virtual music instruments, able to create an interface for the communication between human movements and the computer, where sound and video image are controlled by virtual music instruments in real-time through computers. Lately, he has been creating robots which perform acoustic instruments, and he is gradually constructing a robot orchestra. He has been internationally active and has received numerous prizes and fellowships, such as the Koussevitzky Prize, BSO fellowships, the first prize at the Marzena, Berliner Kompositionsaufträge, a prize from the IMC International Rostrum of Composers in the UNESCO, Paris, DIRECAM, the French Cultural Ministry, and so on.

<http://suguru.goto.free.fr/>

Ludwig Jäger has held a professorship in linguistics and communications studies at the RWTH Aachen since 1982. He is at present spokesman of the Collaborative Research Centre SFB/FK 427 “Media and Cultural Communication” of the Universities of Aachen, Bonn, and Cologne. He has been a member of the Review Panel of the Swiss National Science Foundation, the “Cercle Ferdinand de Saussure”, and the “Société de Linguistique de Paris” among others. He is co-editor of the journal “Sprache und Literatur” and editor of the series “Mediologie” in DoMont press (henceforth Fink). His main research issues include media theory, sign theory, and the history of linguistic theories. Recent publications: *Medienbewegungen. Praktiken der Bezugnahme*. München: Fink (co-ed. with Gisela Fehrmann and Meike Adam, in print); *Deixis und Evidenz*. Freiburg i.Br.: Rombach (co-ed. with Horst Wenzel, in print).

Rudolf Kaehr was born in Switzerland and studied Philosophy, Psychology, Linguistics, Logic, and Mathematics at the universities of Zürich, Münster (Westfalen) and the Free University of Berlin and earned a Dr. phil. (PhD) – *summa cum laude* – with the philosopher and researcher of cybernetics Prof. Gotthard Günther (BCL, Ill., USA) at the University of Hamburg. He was Director of the Institute of Theoretical Biosciences at the Private University Witten/Herdecke (1986 to 1990), has been lecturer at international universities and academies of arts since 1971, and was Visiting Professor at the Academy of Fine Arts, Philosophy, Frankfurt/M., Germany (1998 to 2000), Research Associate at the Academy of Media Arts, Computer Sciences, Cologne (1999 to 2002) and Research Associate at the Goldsmiths College, Centre for Cultural Studies, University of London, 2004-2005. He is at present Director of the ThinkArt Lab Glasgow (<http://www.thinkartlab.com>) in Scotland, where he lives. He is a founding member of the Institute for Cybernetics and Systems Theory e.V. Bochum, Germany (1991).

Jin Hyun Kim studied Musicology and Philosophy at the Seoul National University (Korea) and at the University of Hamburg and received her PhD – *summa cum laude* – at the University of Osnabrück, with a Doctoral Thesis on embodiment in interactive music and media performances – taking into account perspectives from media theory and cognitive science. Since 2002 she has been a member of the Collaborative Research Centre SFB/FK 427 “Media and Cultural Communication” at the Universities of Aachen, Bonn, and Cologne. Within the scope of this, she is currently engaged in the research project “Artistic Interactivity in Hybrid Networks” dealing with interactive audio programming (live coding), robotic arts and Artificial Life Art in cooperation with the Academy of Media Arts Cologne. Her current research issues include New Media Theory, embodiment and mediality of (musical) aisthesis

and (music) cognition, interdisciplinary approaches to musical expressiveness, interactive music and media performances. She has published articles on media theory, media art, music aesthetics, music cognition, interactive music, sound computing, and human-computer and human-robot interaction, among other things.

Sybille Krämer is Professor of Philosophy at the FU Berlin and a permanent fellow at Wissenschaftskolleg Berlin. She is a founding member of the *Helmholtz-Zentrum für Kulturtechnik* and has been a member of the German Council of Science and Humanities from 2000 to 2006 and a referee of the European Research Council since 2007. She is supervisor of both the project as part of the Collaborative Research Centre “Kulturen des Performativen” and the interdisciplinary research group “Bild, Schrift, Zahl”, and is spokeswoman of the research training group 1458 “Notational iconicity: On the materiality, perceptibility and operativity of writing”. Furthermore, she has conducted several projects in the field of philosophy of language and media theory funded by the German Research Foundation. Her main research issues include philosophy and mathematics in the early modern age, theory of mind and of consciousness, interpretations of computers, semiotics and media theory, philosophy of language and basic problems of cultural studies. Selected recent publications: (ed.) *Performativität und Medialität* 2004; (co-ed. with Grube/Kogge) *Schrift. Kulturtechnik zwischen Auge, Hand und Maschine* 2005; (co-ed. with Doris Kolesch) *Stimme* 2006; (co-ed. with Grube/Kogge) *Spur. Spurenlesen als Orientierungstechnik und Wissenskunst* 2007; *Medium, Bote, Übertragung. Kleine Metaphysik der Medialität* 2008.

Martina Lecker is at present a Junior Professor of Theatre and Media at the Universität Bayreuth. She studied Theory of Theatre, Philosophy and German Studies in Berlin and Paris, and finished her education in theatre in Paris under Etienne Decroux and Jacques Lecoq. Combination of theory and practice in “Theatrietheater” is a part of the profile of her work. The main focuses of her research are theatre and media (intermediality), the history and theory of computers, the combination of science, media and art, theatricality and performativity of Web 2.0. Her most important publications are *Mime, Mimesis und Technologie*, München 1995; *Maschinen, Medien, Performances. Theater an der Schnittstelle zu digitalen Welten* [with CD-ROM “Interfaces, Interaktion, Performance” of Irina Kaldrack and Martina Lecker], Berlin 2001; (with Söke Dinkla as coauthor) *Tanz und Technologie. Auf dem Wege zu digitalen Inszenierungen* [with DVD], Berlin 2002; and (co-ed. with Derrick de Kerckhove and Kerstin Schmidt) *McLuhan neu lesen. Kritische Analysen zu Medien und Kultur im 21. Jahrhundert*, Bielefeld 2008 [with DVD]. She has also written various papers about theatre/performance and

media, about the history of theatre of computers, and about the history of computer of theatre.

Christoph Lischka studied Composition, Piano, Musicology, Philosophy, and Mathematics at Cologne University of Music, the University of Cologne, and the University of Bonn. He has worked as a software engineer, artist, research scientist, and university lecturer at several institutions (e.g. the Fraunhofer Institute St. Augustin, Cologne University of Music, University of Cologne, and the Academy of the Arts Düsseldorf) in the fields of Artificial Intelligence, Music Theory, Cognitive Science, Philosophy, and Robotics. In his current research the focus is put on the interplay of art and convergent technologies (NBIC), particularly nanobiotechnology. Since 2007, Christoph Lischka has been Professor of Poietic Machines (Autoaktive Systeme) at the University of the Arts Bremen.

Barbara Mazzarino, PhD, computer engineer, is research assistant at University of Genova, Casa Paganini – InfoMus Lab. Her research interests include real-time analysis of expressive content in human full-body movement and gesture, multimodal interfaces, multimodal interactive systems for performing arts and for therapy and rehabilitation. She is currently working as local project manager at the EU-ICT Coordination Action CAPSIL on ambient assisted living and remote monitoring of elderly and disabled people.

Anthony Moore is a composer and media artist and, since 1996, tenured Professor at the Academy of Arts and Media Cologne in the department of Art and Media Science, where he works on the theory and history of sound. He is the author of numerous musical pieces, songs, sound installations and film compositions which have received international prizes; in 1972 he was founder of the band “Slapp Happy”; he was co-writer with the music group “Pink Floyd” during the recording of two albums, working on concepts, sounds and lyrics. He composed the television opera “Camera”, a commissioned work from Channel 4. Polygram recorded three albums of his work, “Pieces from the Cloudland Ballroom”, “Secrets of the Blue Bag” and “Reed, Whistle & Sticks”, for voices, strings, woodwind and percussion. In 1996 he became Professor for Auditive Design in the media and head of the Music Department at the Academy of Arts and the Media Cologne (KHM); from 2000 to 2004 he was elected Principal of the Academy in Cologne. He has been the initiator and art director of a number of sound events, including “per>SON”. Besides lecturing he continues to write and compose.

Frieder Nake is a mathematician who is also recognised, through national and international exhibitions, as an artist. However, for decades his professional career has been in computer science, specialising in computer graphics and interaction. He has held positions at the universities of Stuttgart, Toronto, British Columbia (Vancouver), and Bremen. Since 1972 he has developed a critique and theory of computing which led him into the design of digital media. His concepts are machinisation of mental labor, instrumental medium, semiotic machine, and algorithmic sign. Since 2004, he has been with the University of the Arts in Bremen. Selected publications: *Ästhetik als Informationsverarbeitung*, Vienna/New York 1974; *Die erträgliche Leichtigkeit der Zeichen. Ästhetik, Semiotik, Informatik, Agis*, Baden-Baden 1994; (with Diethelm Stoller) *Algorithmus und Kunst. Die präzisen Vergnügen*, Hamburg, 1993.

Werner Rammert is Professor of Sociology and Social Studies of Technology and Director of the Centre for Technology and Society at the Berlin Institute of Technology. He was the co-founder of the yearbooks "Technology and Society" (10 vol.) and of the interdisciplinary DFG program "Socionics" (6 years). He has been a visiting professor/fellow at the Vienna Institute of Technology, at Stanford University, and at the Advanced Centre ZiF at the University of Bielefeld. His research interests include philosophy and the history of technology, the social theory of pragmatism, technology and innovation studies, human-technology relations, and media studies (telephone, PC, knowledge-based systems, ubiquitous computing). His TUTS research group develops the tools and methods of "socio-technical constellations analysis", "technography", and "innovation biography".

Julian Rohrhuber currently works in the research project "Artistic Interactivity in Hybrid Networks" at the University Cologne and the Academy of Media Arts. Investigating the culture of abstraction and foundational discourses, he works on algorithmic acoustics, art theory and philosophy of science. Specific projects include: a system for interactive programming, sonification in science, algorithms for cultural anthropology. His interests also include video and sound installations and film sound. Select recent publications: *New Mathematics and the Subject of the Variable* (in: *Variantologie* 4 in print); *Network Music* (in: *The Cambridge Companion to Electronic Music* 2008); *Mengenlehre* (in: *Unmenge – Szenen verteiler Handlungsmacht* 2008); *Artificial, Natural, Historical. Acoustic Ambiguities in Documentary Film* (in: *Transdisciplinary Digital Art: Sound, Vision and the New Screen, Communications in Computer and Communication Science* 2008); (with Renate Wieser) *The Invisible Hand* (in: *Readme 100. Temporary Software Art Factory* 2007).

Lasse Scherffig studied Cognitive Science at the universities of Osnabrück/Germany and Oswego/USA and Digital Media at the University of Bremen/Germany and the Academy of Art and Design Zürich/Switzerland. His master thesis was written during a scientific residence at the Institute for Basic Research of the ZKM, Karlsruhe. Since 2006 he has been a member of the artistic/scientific staff of the Academy of Media Arts Cologne working in the fields of experimental computer science and human-computer interaction.

Uwe Seifert studied Musicology, Computer Science and Philosophy at the University of Hamburg, from which he received the *Magister Artium*, the *Promotion* (PhD) and the *Venia Legendi* or *Habilitation* (postdoctoral qualification) in Systematic Musicology. Since 1999 he has held a professorship in Systematic Musicology at the University of Cologne. He has been a member of the Collaborative Research Centre SFB/FK 427 "Media and Cultural Communication" since 2002, in which he has been leader of the research projects "Electronic Music Transformation since 1950 – Transcriptive Interaction" (2002-2004) and "Artistic Interactivity in Hybrid Networks" (since 2005). Since 2006 he has been partner of the International Summer School in Systematic Musicology funded by the European Union. His current research interests include New Media Theory, New Media Art, (embodied) cognitive science of music, cognitive musicology, and methodological problems in music research.

Wolfgang Strauss is a German architect, media artist and scientist. He studied Architecture at the Hochschule der Künste in Berlin and has been head of the MARS - Exploratory Media Labs R&D since 1997 for interactive and mixed reality environments. He creates real buildings as well as electronic architecture, knowledge spaces and digital archives. He has had guest professorships and fellowships, and has given talks internationally. Since 1987, when he co-founded Art+Com in Berlin, he has produced a large number of media art and design objects and environments on the topics of networked information space and the visualisation of knowledge in cooperation with Monika Fleischmann. In co-operation with his partner he has received 22 awards (June 2008). He has published more than 100 scientific papers, artistic essays and theoretical articles. Recent R&D activities have been knowledge discovery tools, artistic installations such as "Energie-Passagen", applications such as the "interactive poster" and patented interfaces like the contactless "PointScreen". <http://netzspannung.org/about/mars/projects/en>

Georg Trogemann has been a full Professor for Experimental Computer Science at the Academy of Media Arts Cologne since 1994. He studied Information Technology and completed his doctoral degree in 1990. His research focuses on pattern recognition and mathematics. He is a member of the scientific staff at the University in Erlangen. He received the 1993 Prix Ars Electronica, Linz, as well as the Golden Nica Award for Interactive Art with the Knowbotic Research Group. He had a study residence in England in 1993 and was a guest at the Royal College of Art, London. His research interests include Art und Design Research, Interface Cultures, and the Theory of Artefacts.

Gualtiero Volpe, PhD, computer engineer, is assistant Professor at University of Genova. His research interests include intelligent and affective human-machine interaction, modeling and real-time analysis and synthesis of expressive content in music and dance, and multimodal interactive systems. He is member of the Board of Directors of AIMI (Italian Association for Musical Informatics). He was Chairman of the V Intl Gesture Workshop and of the 8th Intl Conference on New Interfaces for Musical Expression (NIME 2008), and Guest Editor of a special issue of Journal of New Music Research on "Expressive Gesture in Performing Arts and New Media" in 2005.

Gil Weinberg is the Director of Music Technology at Georgia Institute of Technology, where he founded the Master of Science in Music Technology program and the cross-campus Music Technology Research Center. In his academic work Weinberg attempts to expand musical expression, creativity, and learning through meaningful applications of technology. His research interests include new instruments for musical expression, musical networks, machine and robotic musicianship, sonification, and music education. Weinberg's music has been featured in festivals and concerts such as Ars Electronica, SIGGRAPH, ICMC, and NIME, and with orchestras such as Deutsches Symphonie-Orchester Berlin, the National Irish Symphony Orchestra, and the Scottish BBC Symphony. He has published more than 30 peer-reviewed papers. His interactive musical installations have been presented in museums such as the Smithsonian Museum, Cooper-Hewitt Museum, and Boston Children's Museum. With his perceptual robotic percussionist, Haile, he has traveled around the world, giving dozens of concerts. As a result of this project, Weinberg has recently been awarded a National Science Foundation grant to continue to explore the concepts of machine and robotic musicianship. He received his M.S. and Ph.D. degrees in Media Arts and Sciences from the Massachusetts Institute of Technology, after co-founding and holding a number of positions in the music and media software industry in his home country Israel.

