

RADICAL ATOMS

and the alchemists of our time

The 2016 Ars Electronica Festival

Festival for Art, Technology and Society

September 8-12, 2016 in Linz, Austria

Press releases and images as well as online accreditation are available at
<http://www.aec.at/radicalatoms/en/>.

Ars Electronica Festival 2016

RADICAL ATOMS – and the alchemists of our time

(Vienna, August 31, 2016) What's emerging in the wake of self-driving cars and the Internet of Things? The 2016 Ars Electronica Festival focuses on our modern-day alchemists—a new generation of artists, hackers, do-it-yourself 3-D printers, genetic engineers and artificial intelligence researchers who are on the verge of changing our world. The trailblazing work that's bringing this about will be showcased at Ars Electronica in an extraordinary mix of formats and productions. The main venue of these happenings will be—one last time—POSTCITY, the former Austrian Postal Service logistics facility at Linz's main train station. Other Festival locations are the OK Center for Contemporary Art, CENTRAL cinema, Linz Art University, the LENTOS Art Museum, the Brucknerhaus, the new Bruckner University, St. Mary's Cathedral (*Mariendom*) and, of course, the Ars Electronica Center. Another hotspot this year is Donaupark, Linz's riverside park that's the place to go to witness Linz's annual open-air extravaganza, the *Klangwolke* (2016 theme: "River of Knowledge"), as well as the spectacular European public debut of the world's largest swarm of unmanned aerial vehicles.

The 2016 Program Highlights

Festival Theme Symposium

RADICAL ATOMS 1.1 – FROM VISION TO PRACTICE / Fri, Sep 9 / 10:00-13:30 / POSTCITY

THE ALCHEMISTS OF OUR TIME / Fri, Sep 9 / 14:30-17:40 / POSTCITY

RADICAL ATOMS 1.2 – IMPACT AND EXPECTATIONS / Sat, Sep 10 / 12:00-16:00 / POSTCITY

ART AND SCIENCE AT WORK / Sun, Sep 11 / 10:00-16:00 / POSTCITY

A major symposium focusing on the respective annual theme is a mainstay of every Ars Electronica Festival, and this year is no exception. From Friday to Sunday, POSTCITY will be the setting for four panels: two dealing with Radical Atoms ("From Vision to Practice" and "Impact and Expectations"), one with "The Alchemists of Our Time" and one with "Art and Science at Work." Consideration of radical atoms is essentially a matter of the amalgamation of the digital and physical worlds—the idea and concrete examples of its implementation. With work being done by the Tangible Media Group at MIT Media Lab in Boston and by the Ars Electronica Futurelab as their point of departure, pioneers and experts will peer into the future of and with radical atoms. On Friday, the focus will be on the alchemists themselves. First, there'll be a consideration of the historical techniques of alchemy; then, scrutiny of who the alchemists of our time actually are, what they're working on, and the framework conditions that are necessary for them to succeed. At the Art and Science Symposium on Sunday, the recipients of Art and Sciences residencies at the European Space Agency, the European Southern Observatory and the Ars Electronica Futurelab will occupy the spotlight. At the center of symposium participants' attention will be the potential for innovation inherent in a process of exchange and collaboration among artists on one hand and scientists

and engineers on the other. Wrapping things up will be a discussion of the future of laboratories. The lineup of panelists includes scintillating speakers from throughout the world, including Hiroshi Ishii, Ivan Poupyrev, Tomotaka Takahashi, Carlo Ratti, Fumio Nanjo, Shiho Fukuhara and Joachim Sauter.

Helpers Conference

Sat, Sep 10 / 10:30-18:30 / POSTCITY

The Helpers Conference is all about volunteers and their committed efforts on behalf of refugees. There'll be presentations of inspiring projects and initiatives in Germany and Austria—for instance, Habibi & Hawara, the first restaurant run by refugees for Austrians in Vienna, and the Sharehouse Refugio in Berlin. Attendees will include Christoph Pinter, director of UNHCR Austria, blogger Hussam Eesa, whose postings entitled “Raqqa is Being Slaughtered Silently” garnered attention worldwide, and author/streetworker Hammed Khamis, whose blog about the “Jungle of Calais” was nominated for the 2016 Grimme Online Award. And Paul Feigelfeld will present his “Refugee Phrasebook” that was honored with an Award of Distinction by the Prix Ars Electronica this year.

Radical Atoms Exhibition

Thu, Sep 8 to Sun, Sep 11 / 10:00-20:00, Mon, Sep 12 / 10:00-18:00 / Ars Electronica Center

How do we get the digital (back) into the physical world? An answer to this question could be so-called radical atoms. In a sort of digital core meltdown, they bond information and material—the information liberated from the constraints of the pixel realm, the atoms wrenched out of their static state and set in motion. The results are smart materials that can be computer-modeled and remodeled into ever-new forms. Radical atoms in the hands of visionary scientists and engineers are being formed into high-tech materials and applications with astounding properties and capabilities. Neuroscience and biotechnology, robotics, hardware and software play roles in this; so do traditional practices in the crafts and trades. A hotspot of these trailblazing developments is the Media Lab at the Massachusetts Institute of Technology (MIT), where Hiroshi Ishii and his Tangible Media Group have been working on new forms of human-machine interaction for over 20 years. The breakthrough prototypes that have been emerging there can now be seen in the Radical Atoms exhibition at the Ars Electronica Center.

Alchemists of our Time Exhibition

Thu, Sep 8 to Mon, Sep 12 / 10:00-19:30 / POSTCITY

“Alchemists of our Time” is a sprawling exhibition that features an inspiring mix of artistic takes on futuristic technologies. The projects on display provide fascinating insights into their creators' approaches and methods. A high-profile eye-opener fronts this array: “Sculpture Factory” by Davide Quayola (IT) demonstrates how easily an industrial robot can morph into a journeyman sculptor. Right on site in POSTCITY, it will serially replicate meter-high sculptures by Michelangelo. Close by is a presentation of the projects singled out for recognition with this year's STARTS Prizes awarded by the European Commission: “Magnetic Motion” by Iris

van Herpen, and “Artificial Skins and Bones,” several projects produced under the aegis of Berlin Weissensee Academy of Art, Fablab Berlin and Otto Bock, the world’s leading manufacturer of prostheses. Here, festivalgoers can also partake of the works created by artists who’ve just completed an Ars Electronica residency—for example, “Masses” and “Stones” by Quadrature (DE), an artists’ collective that recently spent time at the European Southern Observatory’s facilities in Chile and Germany. The “Alchemists of Our Time” exhibition is comprised of 144 works by 230 artists.

STARTS Exhibition

Thu, Sep 8 to Mon, Sep 12 / 10:00-19:30 / POSTCITY

Ars Electronica Linz was selected to conduct the competition to determine the first two recipients of an award launched this year by the European Commission that is as prestigious as is highly endowed. The STARTS Prize, each accompanied by a €20,000 stipend, honors innovative projects at the interface of science, technology and the arts—thus, the name STARTS—in two categories: one for artistic research, and thus projects with the potential to influence or change the way technology is deployed, developed or perceived, and one for innovative cooperative ventures teaming up industry/technology and art/culture in ways that open up new paths for innovation. From among 1,861 entries from 54 countries submitted in response to the open call between February 1 and March 15, 2016, the jury decided on “Magnetic Motion” by Iris van Herpen (NL) and the Artificial Skins and Bones project seminar offered at Berlin Weißensee School of Art jointly with Ottobock and Fab Lab Berlin. Both prizewinners as well as approximately 30 others submitted for STARTS Prize consideration will be presented in POSTCITY during the Ars Electronica Festival.

Tsinghua University on Campus

Thu, Sep 8 to Sun, Sep 11 / 11:00-21:00 / Mon, Sep 12 / 11:00-19:00 / Linz Art University

China’s history is long and awesome, full of tales and traditions passed down from time immemorial. How do students at Tsinghua University deal with this monumental cultural heritage when they approach it in terms of media art? At this year’s Campus Exhibition, you can see for yourself. Here, inner-city lanes dating back to the Ming Dynasty, the ancient ceramic kilns of Hunan Province, the terracotta army of Emperor Qin Shihuangdi and traditional shadow theater encounter virtual reality, data visualizations, animation and state-of-the-art technology.

Interface Cultures Speculate on Materials of the Future

Thu, Sep 8 to Mon, Sep 12 / 10:00-19:30 / POSTCITY

Once again this year, an exhibition is showcasing the talents of Linz Art University undergrads. “Speculative Materiality” is a collection of young media artists’ takes on a diverse array of materials and their future potential. It features prototypes of smart objects designed to bring more freedom (of movement) into our everyday life; at the same time, these artistic approaches call our quotidian habits into question. Visitors to this show will search in vain for

computer monitors and displays or virtual—and thus, abstract—worlds. This is a conglomeration of materials and objects, each one of which offers grounds for speculation.

Ars Electronica & Intel Present DRONE 100 – Spaxels over Linz

Sat, Sep 10, 19:45-19:57 / Donaupark

“DRONE 100 – Spaxels over Linz” is a spectacular performance by unmanned aerial vehicles being staged by Ars Electronica and Intel on the evening of September 10th. Weather permitting, 100 Spaxels—LED-studded quadcopters—will demonstrate their airborne artistry above the Danube as the opening act of the 2016 *Visualisierte Klangwolke* open-air extravaganza, “River of Knowledge.” Following their world-record-setting flight in late 2015 in Tornesch near Hamburg, the drone swarm has performed publicly only once. As the highlight of the Vivid Sydney Festival, the Linz-based formation flew above the Australian metropolis’ harbour directly adjacent to the world-famous opera house. “DRONE 100 – Spaxels over Linz” is a high-profile homecoming! Accordingly, Part 1 of the show has been choreographed especially for Linz and will be accompanied by a work specially created by local sound artist and composer Sam Auinger. Part 2 reprises the finale of the record-setting performance flown for Intel in November 2015.

DRONE LAB in POSTCITY

Thu, Sep 8 to Mon, Sep 12 / 10:00-19:30 / POSTCITY

Ars Electronica is setting up a Drone Lab in POSTCITY as a customized setting for races, demos, performances and presentations that provide fascinating insights into current applications of drone technology. Festivalgoers will definitely not want to miss the sessions starring one of the top teams on the international racing scene: The XBlade Allstars’ quadcopters reach speeds of up to 140 km/h as they careen through a specially-constructed racetrack in the *Gleishalle*. On the next floor up in the Drone Lab, pilots will demonstrate maneuvering at a less breakneck tempo but a far higher degree of precision. The Drone Academy offers all comers the opportunity to get their own hot little hands on a drone’s steering console. Interesting speeches and demos by experts will brief festivalgoers on the spectrum of drone applications: the racing scene, search & rescue missions, film & photography assignments and even artistic performances. And the Ars Electronica Futurelab’s SPAXELS crew provides an overview of interesting developments in the drone field.

Festival Opening in POSTCITY

Thu, Sep 8 / beginning 21:00 / POSTCITY

Kicking off the opening of this year’s festival is a drastic performance by sound artist FM Einheit (DE), the centerpiece of which is POSTCITY’s bank of 13-meter-tall spiral packet chutes symbolizing a society on a shopping binge. Next up on the Train Hall’s Main Stage is the artists collective Silk Fluegge (AT) with a dance performance entitled “MYGRATION—beget” that treats origins, identity and one’s sense of belonging. For his performance “Roboaction(s) A1 K1,” Dragan Ilić (RS/US) has himself bound to a several-meter-long robotic

arm and thus renders abstract images. Navid Navab's (CA) synaesthetic audiovisual performance "Practices of Everyday Life / Cooking" is an account of a chef in a specially prepared kitchen setup. Ei Wada (JP) then takes the spotlight for a recital on Kankisenthizer, an instrument of his own invention that generates both sounds and light via fans. The wrap-up is a no-less-unconventional intervention at speeds of up to 100 km/h: "XBlade Allstars Get Radical" is the motto of one of the most successful crews on the international drone racing scene. The musical portion of the evening features Exploded View (DE/MX), Planningtorock (UK), Dasha Rush (RU) and Russian video artist Stanislav Glazow aka Licht Pfad (RU), as well as an audiovisual performance entitled ANTARCTIC TAKT.

Big Concert Night: Musical Highlight in POSTCITY

Sun, Sep 11 / Doors open: 19:30, Start: 20:00 / POSTCITY

This event has been inseparably linked with the name Dennis Russell Davies since the very first Big Concert Night in 2002, when he had just been appointed principal conductor of Linz's Bruckner Orchestra. In cooperation with Gerfried Stocker, he conceived and launched a new format dedicated to bringing together classical and electronic music and computer-generated visuals. Another key element of the Big Concert Night's concept has been to get these proceedings out of conventional concert halls and into extraordinary locations. The plan was a smash hit, and the Big Concert Night has been a highlight of the Ars Electronica Festival ever since. And once again this year, this main event promises to be something special, starting with the venue itself: the *Gleishalle*, the huge railroad freight car loading/unloading dock of a decommissioned Postal Service logistics facility.

The Bruckner Orchestra conducted by Dennis Russell Davies will begin by performing "La Lucha," a piece for wind instruments by Upper Austrian composer Simone Zaunmair. The program continues with "Rendez-vous avec Claude," an ensemble piece by Linz composer Marc Reibel. Then, FM Einheit will transform POSTCITY's 13-meter-tall spiral packet chutes into a huge musical instrument and a metaphor for a society on a consumption binge. Back at *Gleishalle*, the spotlight shifts again to Dennis Russell Davies and the Bruckner Orchestra for a performance of Maurice Ravel's "Mother Goose" and Igor Stravinsky's "The Rite of Spring." The real-time visualizations of both pieces will be provided by the Ars Electronica Futurelab. The program's next highlight is "Light Impulse–Radical Atoms 2016 / Vers la Flamme 1914" by artists AROTIN & SERGHEI and French pianist Mikhail Rudy. Sound artist AGF then stages an audiovisual show entitled "The Radical Self" in the *Gleishalle*, which will also be the setting of the evening's finale in which an artists' collective named tam tam–Sam Auinger and Hannes Strobl–enables the audience to hear and feel the very specific acoustic qualities of this extraordinary space.

Pao-Chang Tsai: Solo Date

Thu, Sep 8 / 18:30-19:30, Fri, Sep 9; Sat, Sep 10 & Sun, Sep 11 / 17:00- 18:00 / LENTOS Art Museum

What begins with a consideration of the question of how to go on with life after the loss of a loved one quickly turns into a confrontation with the role that artificial intelligence might someday play in our life. "Solo Date" is a dramatic play that focuses on human feelings and

our deployment of technology. In this work, Taiwanese actor, director and writer Pao-Chang Tsai poses essential questions concerning future relations between humans and machines.

CyberArts Exhibition: Prizewinning Works of Media Art

Thu, Sep 8; Fri, Sep 9; Sun, Sep 11 and Mon, Sep 12 / 10:00-20:30; Sat, Sep 10 / 10:00-22:00 / OK Center for Contemporary Art

From an espionage installation and encoded poems robotically milled into tree bark all the way to a do-it-yourself home surgery system—as always, the CyberArts exhibition is a showcase of excellence in media art. The show features 32 works singled out for recognition in 2016. The Prix Ars Electronica also annually honors the merits and pioneering achievements of an outstanding personality. Prominent art critic and exhibition curator Jasia Reichardt (GB) secured her place in media art history in 1969 with a show entitled “Cybernetic Serendipity” that was the first to play up computer-based art. She’s the 2016 Visionary Pioneer of Media Art.

Prix Ars Electronica Forums: Talk with the Grand Prizewinners

Fri, Sep 9 / 13:00-14:45 / Prix Forum Computer Animation/Film/VFX: Boris Labbé (FR), Yuya Hanai (JP)

Sat, Sep 10 / 13:30-15:00 / Prix Forum Digital Communities: Stacco Troncoso (ES), Paul Feigelfeld (AT), Caoimhe Gallagher (IR), Nakano Hitoyo (JP)

Sat, Sep 10 / 15:15-16:45 / Prix Forum Interactive Art +: Mathias Jud (CH) und Christoph Wachter (CH), Frank Kolkmann (NL), Ann-Katrin Krenz (DE)

Sat, Sep 10 / 17:00-18:30 / Prix Forum Visionary Pioneers of Media Art: Jasia Reichardt (UK)

The Prix Forums offer marvelous opportunities to engage in the fine art of conversation with this year’s Golden Nica recipients. Each forum is moderated by a juror in the corresponding Prix Ars Electronica category. First, the artist presents her/his prizewinning work; this is followed by a Q&A session that inevitably segues into a fascinating discussion of various facets of contemporary media art. Leading off are Christoph Wachter and Mathias Jud (both CH), who’ll discuss their project “Can you hear me?” Next up is Stacco Troncoso (ES) of the P2P Foundation, followed by Paul Feigelfeld, compiler of the “Refugee Phrasebook.” Many Prix aficionados are especially looking forward to the appearance of Jasia Reichardt, this year’s Visionary Pioneer of Media Art. The prominent art critic and exhibition producer made headlines in 1968 with “Cybernetic Serendipity,” a trailblazing exhibition at London’s Institute of Contemporary Arts in which, suddenly, instead of human beings, computers, machines and algorithms were being played up as “artists.”

Animation Festival: The Year’s Best Animated Films

Thu, Sep 8; Sun, Sep 11 and Mon, Sep 12 / 12:00-23:00 / CENTRAL

The Ars Electronica Animation Festival is a highlight of every Ars Electronica Festival. This year’s program includes, of course, screenings of the best works submitted to the 2016 Prix Ars Electronica—for instance, “Rhizome” by Boris Labbé and “Cold Stares” by Nosaj Thing. Plus, there’s “Expanded Animation,” a lineup of workshops, seminars and speeches elaborating on the latest trends in the animation genre.

Organic Market & Mini Maker Faire: From Dough to Steampunk

Organic Farmers Market: Sat, Sep 10 / 10:00-17:00 / POSTCITY

Mini-Maker-Faire: Sun, Sep 11 / 10:00-19:00 / POSTCITY

Lots of homemade goodies await festivalgoers in POSTCITY on Saturday and Sunday. First, 17 Upper Austrian farmers who are members of BIO AUSTRIA will be selling their organic products. The selection includes organic ice cream, vegetarian *seitan*, poppy seed oil and artisanal *schnapps*. The next day, lateral thinkers and creative inventors will be gathering in POSTCITY for a Mini Maker Faire and bringing lots of DIY projects along with them. The offerings will be supplemented by speeches and workshops on many interesting topics: 3-D printing, Arduino, crafting, electronics, food, hacking, handicrafts, hardware, the internet of things, music, quadcopters, Raspberry Pi & Co., robots, science & research, steampunk and wearables. The watchwords: open it up, look inside, take it apart and put it back together again.

WE GUIDE YOU!

Once again this year, festivalgoers have a wide array of guided tours to choose from. The WE GUIDE YOU lineup includes daily Highlight Tours, Kids Tours, CyberArts Tours and Family Tours. Community Parcours are guided tours offered free of charge and conducted by native speakers of Arabic, Farsi, Igbo, Rumanian, Russian, Serbo-Croatian and Turkish. Plus, there are special Community Parcours in sign language and for people with impaired vision.

Press Appointments and Organizational Matters

PRESS CONFERENCES, OPENINGS AND EVENTS

Thu, Sep 8 / 10:00-11:30 / OK Center for Contemporary Art	CyberArts (press tour)
Thu, Sep 8 / 13:30-16:00 / POSTCITY	Highlight tour with Gerfried Stocker, artistic director of Ars Electronica
Thu, Sep 8 / 17:00 / OK Center for Contemporary Art	CyberArts (opening)
Thu, Sep 8 / 18:30 / LENTOS Art Museum	Solo Date (premiere performance)
Thu, Sep 8 / 20:00 / Linz Art University	Campus: Tsinghua University (opening)
Thu, Sep 8 / 21:00 / POSTCITY	Festival Opening 2016
Fri, Sep 9 / Doors open: 18:15; Start: 18:45/ Brucknerhaus	Ars Electronica Gala
Sat, Sep 10 / 19:45-19:57 / Donaupark	"DRONE 100 – Spaxels over Linz"
Sat, Sep 10 / 20:30 / Donaupark	"River of Knowledge" – Klangwolke
Sun, Sep 11 / Doors open: 19:30; Start: 20:00 / POSTCITY	Big Concert Night
Mon, Sep 12 / 10:00-11:00 / POSTCITY	2016 Festival wrap-up (press conference)

PRESS PHOTOS

Ars Electronica maintains a Flickr account from which printable images can be downloaded free of charge: www.flickr.com/arselectronica. All photos of this year's Ars Electronica Festival are conveniently grouped together here. You'll find the corresponding link in the Press area of our Festival website: <http://www.aec.at/radicalatoms/en/>.

PRESS INFO

All press releases having to do with Ars Electronica 2016 are available in chronological order in the PRESS area of the Festival website: <http://www.aec.at/radicalatoms/en/>.

INTERVIEW REQUESTS

We'll contact anyone you wish to interview and make an appointment for you. You can conveniently submit interview requests by using the online form provided on the Festival website or, beginning September 8, 2016, you can submit them in person at the Press Office in POSTCITY. If you have questions, please contact Katja Nitsche at +43-699-1778-1581 or via e-mail to katja.nitsche@aec.at.

PRESS OFFICE

Our Press Office is located in **POSTCITY** right next to Linz's main train station (*Hauptbahnhof*). The address is Bahnhofplatz 11, 4020 Linz. Simply follow the signs from the

main concourse of the train station right to POSTCITY. **Our Press Office is open daily September 8-12 from 10 AM to 7 PM.**

You can contact us in person or at robert.bauernhansl@aec.at or +43-699-1778-1305.

About Ars Electronica Linz GmbH

Ars Electronica is a cultural institution, an educational facility and an R&D lab. A wholly-owned subsidiary of the City of Linz, this organization is comprised of four divisions: the Ars Electronica Festival, the Prix Ars Electronica, the Ars Electronica Center and the Ars Electronica Futurelab. These divisions mutually inspire one another, constituting a circuit of creativity at the core of which are issues of great future importance at the nexus of art, technology and society. Ars Electronica defines itself as an integrated organism that is constantly reinventing itself:

The FESTIVAL as test environment, and the PRIX as competition of the best and brightest—both of them international, artistic, experimental, focused on the leading edge. The CENTER as year-round presentation and interaction platform—local, educational, entertaining and conceived to appeal to general audiences. The FUTURELAB as research and development node—innovative, creative, endowed with strong technical competence and implementation skills, and linked up to a global network of universities, research facilities and corporations. And SOLUTIONS, the latest addition the Ars Electronica spectrum, delivering ways and means of developing customized solutions for interactive products and services and thereby complementing the competence matrix and closing the last gap in the value-added chain.

Four Strategic Business Fields

Ars Electronica is thus endowed with a sustainable structure that optimally promotes its international orientation while nurturing its local roots. Like no other institution, Ars Electronica takes a comprehensive approach to its dealings with techno-cultural phenomena. Organizationally, this company focuses on four strategic business fields:

Festival/Prix/Exhibitions: This department organizes the annual Ars Electronica Festival, stages the Prix Ars Electronica, a yearly competition that attracts entries worldwide, produces presentations in and for the Ars Electronica Center, and—through its EXPORT unit—curates externally financed exhibitions.

Ars Electronica Center: This department is responsible for the day-to-day operations of the Museum of the Future, and also develops and runs educational and training programs, events such as the Deep Space LIVE series, and workshops designed to reach specific target groups. The in-house event production & catering service is also part of this department.

Ars Electronica Futurelab: This laboratory/atelier does research on and development of innovative applications of new media technologies, conceives exhibition content for the Ars Electronica Center, and carries out externally financed consulting and development assignments. The Futurelab is also working constantly to enhance and upgrade its proprietary Spaxels technology. The commercial appearances of these LED-equipped unmanned aerial vehicles are managed by the recently founded Ars Electronica Spaxels GmbH.

Ars Electronica Solutions: This department adapts and markets Ars Electronica's know-how. The staff specializes in creating custom-tailored, interactive products and services in the areas of event & show design, brandlands & exhibitions and urban media development.

<http://www.aec.at/news/en/>