

Newsletter of the Nordic University Computer Clubs

Letter from the Editor

by Jan Michael Rynning



N the early 1970's computer clubs started growing up at Nordic universities. As years

went by the clubs found out about each other by members visiting other universities.

In 1984 the STACKEN Computer Club organized excursions to the university computer clubs in Trondheim, Gothenburg, Turku/Åbo, Uppsala and Linköping. The idea was born, should we try to get all the clubs together?

In the spring of 1987 Peter Löthberg and I were in Gothenburg, and as usual we payed a visit to the Chalmers Computer Society. One thing I wanted to discuss was a computer club meeting. We ended up in a pizzeria, and there the plans were drawn up for a Nordic university computer club meeting. Whitsuntide seemed like a suitable time, giving us three days for the meeting shortly after the end of the semester. Linköping was chosen as a compromise, right between Stockholm and Gothenburg. I handed out the tasks, and as the others were eager to take them on, it seemed like an easy work for me.

As the meeting approached I found out thet most of the preparations were

still undone, and that left me with the choise of cancelling the meeting or doing the arrangements myself. First, the meeting was postponed for one week and shortened to two days, due to difficulties of arranging visits to companies and a banquet during the Whitsun. Then, I spent a week at the telephone, informing the other clubs of the change of date, trying to find a restaurant willing to take on the banquet (most were booked for weddings or closed for summer), talking to companies worth a visit, and persuading Lennart Lövstrand to give a lecture on electronic mail on his last day in Linköping. Lysator helped me booking a conference room and getting the keys needed.

The club meeting was successful, and as a result a joint organization, the Nordic University Computer Clubs (NUCC), was formed.

My work didn't end at that. I had taken on the responsibility of putting NUCC News together. Well, here it is, far beyond schedule, and STACKEN being one of the clubs that hasn't written a presentation. That will have to go into the next issue, with the presentations that I hope to get after NUCC 88.

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NUCC 88 in Helsinki

by Pertti Kasanen and Jussi-Pekka Mantere



HE SECOND ANNUAL Nordic University Computer Clubs conference will be held at the

Helsinki University of Technology during the weekend 10–12 June 1988, organized by OtaDATA and Tietokilta.

We sincerely welcome you to join us at Otaniemi on Friday 10 June. For Friday evening we have planned a general "Get-Together"-style gathering, so it won't be too great a loss to miss that. By Saturday noon we expect everyone to have arrived in Otaniemi, so that the "official" part of the meeting can begin. At first we'll get to wonder around Otaniemi, the Ota-2000 project will be described and finally the participating clubs introduce themselves.

On Saturday evening we hope to visit some Finnish computer companies (Nokia comes to mind), we'll have a classy dinner and hopefully we'll get a chance to go to a True Finnish Sauna, with appropriate side benefits. Sunday will be spent enjoying the weather and sporting (or barely sporting, if that's the case), and probably visiting the local amusement park Linnanmäki (Borgbacken). Sunday evening the meeting will come to its close.

We expect to host from 50 to 75 delegates, so we hope to see delegates from all Nordic universities' computer clubs. The participation fee will be about 100 Finnish marks.

NUCC 87 in Linköping



HE FIRST Nordic University
Computer Clubs conference
was held at the Linköping

University of Technology during the weekend 13–14 June 1987, organized jointly by the STACKEN Computer Club, the Chalmers Computer Society, and Lysator.

44 participants from 9 university clubs in 3 Nordic countries came together, to get to know each other, learn

about each other's clubs and activities, and have fun.

Saturday 13 June:

Afternoon: Electronic mail lecture.

Visit to Teragon Systems.

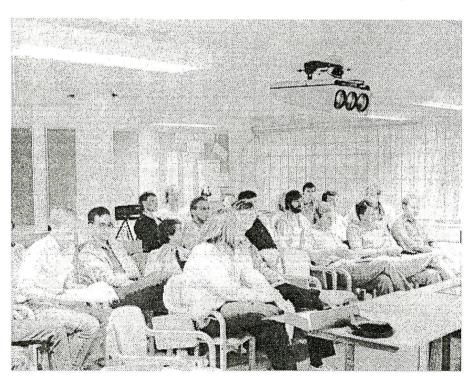
Evening: Banquet.

Sunday 14 June:

Morning: Club presentations.

Club project seminars.

Afternoon: Games and competitions.

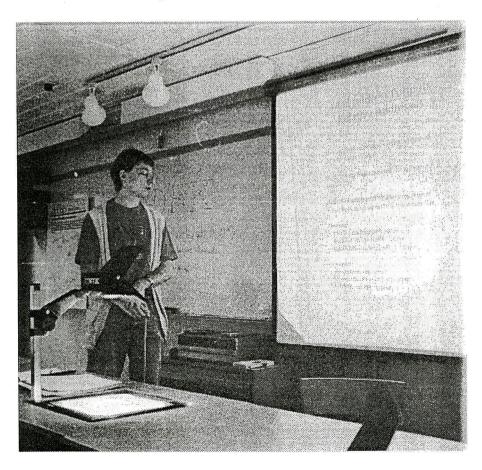


Electronic Mail



ENNART LÖVSTRAND, former Postmaster at the Department of Computer and Infor-

mation Science at the University of Linköping, now at Xerox Park, Cambridge, U.K., gave a lecture on electronic mail, concentrating on address formats, which is a major problem in electronic mail systems involving networks and protocols using different formats. The lecture was highly appreciated by the conference participants, who all use electronic mail for their communication.



Teragon

ERAGON SYSTEMS, founded in 1981, is an offspring company of the Linköping Univer-

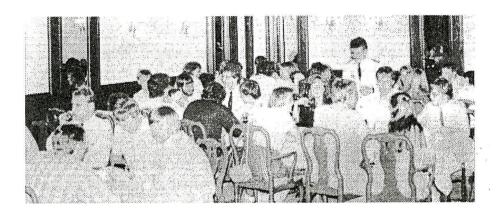
sity of Technology. It develops and sells specialized hardware and software for image analysis and processing.

After presenting the company and its field, Tomas Hedblom demonstrated the capabilities of one of its products, the Electronic Darkroom, in use at several newspapers (photo below).





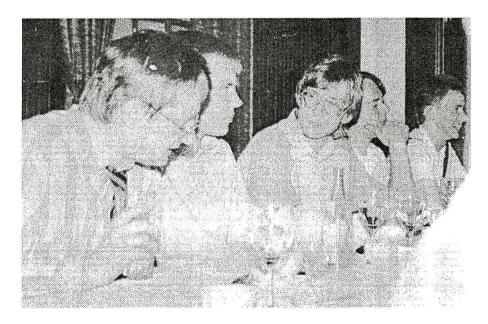
Banquet





URING the banquet several speaches were made, expressing gratitude to the organizers

of the meeting, and the Finnish participants promised to arrange the NUCC 1988 conference in Helsinki.



INFÅ

by Kaj Häggman



NFÅ VID ÅBO AKADEMI R.F. is a society of ADP-students at Åbo Akademi, the Swedish-

speaking University of Åbo (Turku). The society was founded in 1981 and it has about 120 students and former students as members today.

The purpose of the society is to offer its members activities and information related to Computer Science, but also to arrange social activities as an antipole to the sometimes very stressful studies at the university. INFÅ also maintains contact with other similar societies in Finland as well as in Scandinavia. For example, members of different ADP-clubs at Universities all over Finland come together to meet and discuss varius matters. This happening takes place in a different city every year.

Like most societies INFÅ arranges meetings for its members about once a month. Another important part of INFÅ's activities are the excursions (xqr²) to companies and other Universities. Recently visited companies include Unisys, Digital Equipment Corporation, The Union Bank of Finland, and so forth. The big event of the year is the trip abroad. Last year, for exam-

ple, we visited the DEC User Show in London

Sports, visits to theatres, and parties are parts of the regular cultural activities. To help students, INFÅ prints and distributes compendia for courses taught at the University. The club also distributes PC's to students and personnel at Åbo Akademi.

The "club premises" are called Spacebaren, and are situated in the so-called ASA-house on Fänriksgatan, near Domkyrkan (the cathedral), at the end of Biskopsgatan. There is so little room in there, that is's a small wonder that 2 PC's, a terminal, a refrigerator, 2 tables, 9 chairs (occupied by members), compendia, paper, and so forth, fit in the room. Try to imagine all this—in a room with the size of about 2×5 m...

Computers at the students' disposal are a VAX 11/785, a DEC-2060, a UNI-VAC 1100/60, a SUN-3, Hathi (a computer based on 17 Inmos Transputers), a few PDP 11's and a variety of PC's and Mac's.

Membership of INFÅ vid Åbo Akademi r.f. can be granted by its board

to students and ex-students at The Department of Computer Science at Åbo Akademi.

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Modeemi

by Vesa Keinänen



ODEEMI is the computer club at the Tampere University of Technology. It's open for any-

one who's interested in computers and software.

Modeemi was created 10 years ago. For some time Modeemi was almost dead, but for the last 5 years it has been very, very active. We are going to celebrate Modeemi's 10th anniversary this autumm.

Major activities within Modeemi are:

- Hanging around in our club room (as we have some terminals, there is somebody there any time of day)
- Excursions
- Some sports events (of course you know what game 'sähly' is)
- etc. (mostly something informal)

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OtaDATA

by Tuija Karling



TADATA is a computer club for students studying or otherwise intrested in computer sci-

ence in Helsinki University of Technology. It was founded 1969. Unfortunately we don't have any localities of our own for our members to meet, but we try to cover the loss by arranging meetings and activities frequently.

We arrange sauna-evenings regularly about once a month. There our members have an opportunity to meet each other and discuss common things. Sometimes we ask some experts to visit our meeting and tell about their branch. We also arrange squash-evenings and go to theatre together a few times a year. OtaDATA organanizes excursions to near and also further. Every autumn we use to go to Blanko-days in Oulu. It is seminars about computer science and it is arranged by Blanko, which is computer club from Oulu. There we can also meet other Finnish computer science students. We also have a meeting with all Finnish computer clubs once a year. It is arranged by every club in turn. This year the meeting is held in Oulu during the Blanko-days.

This year we are going to have an extra-long excursion. It is arranged together with Tietokilta. A group of our members go to the United States in September. Participants go around USA and visit for instance New York, Detroit, Los Angeles and Dallas.

We also arrange shorter excursions. We visit companies here near Helsinki and sometimes further in Finland.

OtaDATA has more official activities too. OtaDATA publishes books which handle computer science. We also arrange OtaDATA-day, which is seminars about new things in computer science for reperesentants from different companies. OtaDATA-day is held every year in April.

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Data Guild

by Pertti Kasanen



IK (Tietokilta/Datagillet/Data Guild) is a sub-society in the fraternity of the Technical

University. It acts as a uniting body between the students of data processing and is their union in the Technical University. TiK is the newest of the ten guilds and it will celebrate its second anniversary in the spring of 1988.

Members.

Currently the guild has about 300 members. Most of the members are enrobed the educational program of data processing, a few in the other programs. About a hundred new students are accepted to the educational program each year. This is why the membership of the guild is growing fast. Also associate members are welcome to the guild.

Administration.

The deciding body is the guild general meeting. The board, which is in charge of the guild activities, consists of the chairman, the secretary, the treasurer, managers of education, training, excursion and media, among others. In addi-

tion there are many committees taking care of the activity arrangements.

Activities.

TiK maintains good relations with the industry by arranging training and excursions to companies in Finland and abroad, e.g. to the USA in the autumn of 1987. An excursion to the Far East is also being planned... While the guild was being set up, a booklet called BITBANG was published to achieve appreciation among business, universities and associations of data processing. The guild works in intensive cooperation with the OtaDATA association. e.g. in organizing the "Data processing in Business" seminar. In November 1986 TiK organized the FUUG (Finnish UNIX Users Group) meeting and in May the guild was the local organizer of the EUUG Spring '87 Conference.

TiK has active effect on administration of the university. It has representatives in the councils of the faculty and the institutes. In addition guild members participate actively in committees and diversions in order to develop their new educational program. To counterbalance studies the guild organizes recreational activities. Almost weekly the members get together for sauna, singing etc. One of the most important goals is to make the new students accustomed to studying and student life. The guild offers its members both entertainment and profit.

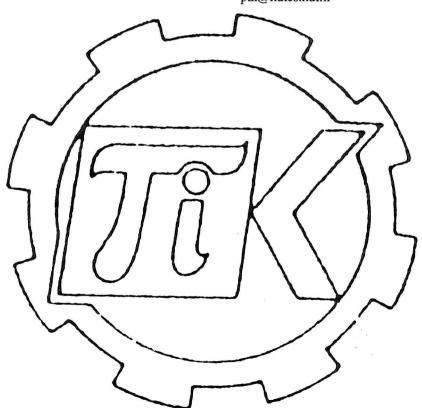
TiK is the newest, the smallest, and the most active guild in Otaniemi. In this way the world known tradition of students of technology is being cherished.

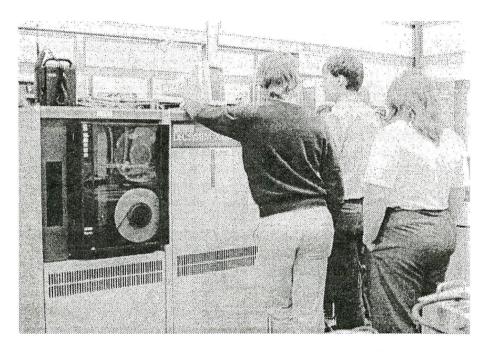
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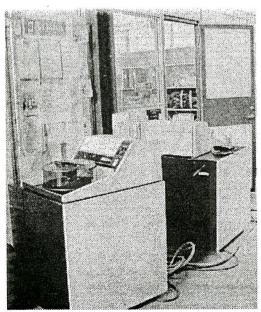
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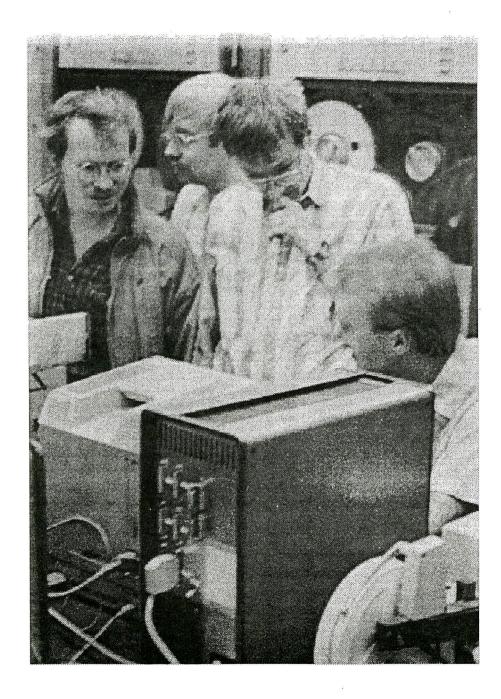




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Top and left: The STACKEN Computer Club brought a DEC-2020 to the Linköping meeting, and connected it to the Swedish university DECnet network (SUNET) through a radio telephone (on top, left) and a modem.

Right: Members of the Chalmers Computer Society gathering around their home built CD3200 (NS32016, UNIX System V), demonstrated at the meeting by its constructor Klas "Radar" Nordström (left). 1-1988



UPDATE

by Tomas Ljungberg



PDATE is a non-political, non-profit society located at the University of Uppsala. Its aim

is to promote the interest in, and the knowledge about, computers. UP-DATE was formed in april 1983, and has since then tried to function as a forum where people interested in computer hardware and/or software can share experiences and ideas.

The society owns two PDP-8 computer systems, one with four DECtape stations, running OS/8.

Membership in UPDATE is open unconditionally to all students at Uppsala University. Other persons wanting to join may be admitted after application.

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The Computer Club of Lund Institute of Technology

by Robert Haneklou



UND is situated in the southern corner of Sweden. Lund is one of the oldest Swedish

cities, actually just about to celebrate its Millenium. Most tourists come here to look at our Cathedral (completed in 1145). But since 1666, lots of young people have come here with another goal altogether—to study at Lund University. This makes Lund a very "academic" city. Of our 80,000 inhabitants more than 20,000 are students.

Today Lund University has eight faculties: natural sciences, technology, medicine, odontology, law, social sciences, humanities, and theology. 3,500 of the students study at the faculty of technology which is called Lund Institute of Technology. Despite our name students from the entire University can and do become members.

Computers at Lund University

Old traditions and new technology

don't always mix well, but here in Lund we believe that we are doing well. At least if we are talking about computers. We have been building and using computer networks for many years now, and today computers are used in all faculties.

The total investments for the present computer equipment at the university can roughly be estimated to 100 million SEK and the annual investments to be of the order of 15–20 million SEK. The vast majority of common, time-shared computers here in Lund are either VAXen or some sort of UNIX machine. All of which interface to the Swedish University NETwork which enable us to put up terminal sessions with almost any other University computer in Sweden.

The future of computing in Lund seems to belong to distributed computing. The Academic year beginning this fall will see investments resulting in some 100 new workstations. Most of

these will run some sort of UNIX, and all will be interconnected in one way or another.

Computer Education

Computer Science is taught to more than one third of the students. Approximately 2,000 students spend more than one term (full-time) studying computer science.

The Computer Club

So, who needs a Computer Club? A University attracts many bright minds. Hopefully their interests coincide well with the actual courses given at that University. But once you have found an interest that really makes you "tick" this may not be enough. Then it is time to join a club, where you can be surrounded by others, sharing the same interests. Together you can have a good time and at the same time reach new heights of knowledge and understanding.

Making this possible for those interested in Computers is our main goal. But we also try to "spread the gospel" by holding courses and seminars, and by making computer power available.

The Past

The Computer Club started rather spon-

taneously in spring 1985. Some students had been talking about getting someone to donate a mainframe, and suddenly one stood in the foyer! 5 tons of machinery occupying some 25 cubic metres that is! A company (Sundsvallsbanken) had donated a IBM 3158 CPU, and another company (ComInvest) had given us some Giga-bytes of IBM disks. What to do?

To take care of it we had to form a Club and The Computer Club (LTH:s Datorförening) was born. Unfortunately our computer had been severely damaged in transit. The compensation we received from the insurance company gave us some starting money.

The Present

Since early this year we have a brandnew AT&T 3B2/400 computer. It was donated to us by Olivetti Computers as part of their "European Unix System V Support Program." It has been up and running for 9 months, and today most of our activities involve this computer. As an example our courses this spring have taught UNIX System V and the programming language C.

What we still lack is premises of our own, but we have strong hopes of solving that problem early this fall.

The Future

Unfortunately our biggest interest—computers—are very expensive. We have the interest, the knowledge and the time to do amazing things with computers. But we can do nothing without equipment. Not having the money needed to buy capable computers and peripherals—we are at the mercy of hardware manufacturers and dealers. Hopefully they will see long-term advantages to having their machines in students' hands, and donate equipment.

What's in it for them? Firstly, press coverage at installation time and student knowledge of the donation throughout the years will add up to considerable amounts of "goodwill." Secondly, students who use a particular machine at University may be loyal to the manufacturer later, as consumers and professionals.

Thus, the future is not entirely in our own hands, but here in Lund we

have good experience from such deals and look at the future with confidence.

The End

Having spent some minutes reading about our Computer Club you have now reached the End. I thank You for taking the time, and urge You to contact us if You have any further questions.

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Ctrl-C

by Lars Fredriksson and John Isaksson



TRL-C is a computer association for undergraduate and graduate students at the Linkö-

ping University and Linköping Institute of Technology (LiTH). It was founded in the early eighties by some students who thought that there was a need for such an association, for students with the common interest in computers and computer programming. Ctrl-C has grown since the beginning and at the present time there are about 50 members. It now has its own facilities at the University.

The purpose of Ctrl-C is to give the members a possibility to use computers, to give help with programming, to give cources for students interested in computers, and to create a positive feeling for computers among the students in general and especially among its members.

The association is open to all the students at the University, regardless of

rase, sex, religion and political views. Ctrl-C does have a close relation to IKP, the Department of Mechanical Engeneering, who has supplied the space and the furniture.

Ctrl-C is now experiencing an expansion with more computers and new locations, which we hope will bring new members. The main goal still remains, to give the members access to computers 24 hours a day, at a low cost.

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Lysator

by Lars Viklund

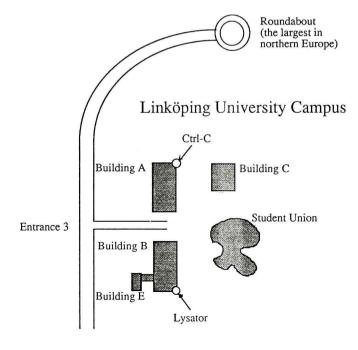


YSATOR (originally a contraction of "Linköpings Y-teknologers Sektions Datorför-

ening") is the students' computer club at the Linköping University. Founded way back in 1973, it is the oldest club of its kind in Sweden, and will celebrate its 16th anniversary in 1989.

One of the main projects undertaken in those early years was the construction of LYS-16, a 16 bit personal computer featuring the IMP 16 bit slice processor. Several LYS-16s were made and sold during the mid seventies.

Throughout the seventies, Lysator received considerable amounts of equipment from the Swedish computer manufacturer DATASAAB. This includes the mainframes D21 and D22, the mini D5 and the experimental Flexible Central Processing Unit (FCPU). The later of which still is in use.



The club also had the possibility to receive the ABC80 prototype no. four, the copies before were aimed for Luxor/DIAB. Lysator was engaged to develop software.

During these first years Lysator was wellknown and had the opportunity to borrow several microcomputers from different manufacturers. In 1979-1981 Lysator had two different rooms at the university. One with the large DATASAAB computers where put and one with the smaller microcomputers. In this "micro-room" there was the old worn-out ABC-80, a newer ABC-800, a 6809-based micro from Canon and one Prim-2000. This room was the room where the members gathered.

At this time there where 20–30 active members. Most of these where working or studying at the university.

In 1982 the activities began to fade. A group of old and active members where involved in a project at the university that was about to become commersial. In 1983 this project became a company called ContextVision AB, and Lysator lost half of their active members. At the same time many other active members began to work far away from Linköping, some of these even went to USA. The few members that was left almost lost their interest in Lysator since they had to do everything by themselves. A major problem for Lysator was raised when the university declared that they couldn't have two rooms occupied by a club with this low activity. So Lysator had to move all computer to a new room, install floor and electricity for the computers. After this noone was happy to be member of a club which only activity was to move around and administrativa. Lysator died.

In 1985 three old members (Göran Åhlström, Göran Karlsson and Sven Eriksson) gathered and thought it was a shame that there where no computer club any more. So they tried to find more people that where interrested in computers. Finally there where some people who wanted to resurrect the old club. They tried to restart some old projects. One was to implement UNIX on the D22, another to invent a new multi-user adventure game called Asgård. The UNIX project stopped after they realised that it was impossible to implement multi-tasking in the D22. The Asgård project had been alive and got new hights with the new members. A new project to implement FORTH on the FCPU was initiated at this time.

Asgård is a multiuser adventure game, written a couple of years ago by Göran Karlsson and Bernth Nilsson. It's based on a LISP interpreter, extended with a multiuser data base, a very general parser, a process machinery, a multiple window system and a message passing system. Most of this is written in C.

Another project is a FCPU microcode cross assembler, written by Paul Svensson in a mixture of YACC, LEX and C. This is an important step towards FORTH on the FCPU.

A couple of times, by different reasons, Lysator has had to move from one place to another. Our new room is under renovation and can be expected to be finished during the second half of 1987. Power supplies and cooling devices are about to be arranged.

Instead of scrapping the oldest systems Lysator decided to donate them to Tekniska Museet (Science Museum) in Stockholm, and to Ericsson Information Systems in Linköping. In return the club received a couple of desktop computers from EIS.

At present, Lysator is trying to acquire some new hardware. Meanwhile the members are using Obelix, a PDP-11/70 running UNIX BSD 2.9, owned by IDA (Dept of CS) and Linus, a DEC-2065 at LIDAC. Furthermore some of the members develop hardware on their

own, e.g. a new terminal interface to be used with the FCPU.

If you want to get in touch with us, join us, or support us, please write to:

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