

Germany Immersion Trip 2008 Diary

Created by the Participants of GIT08

October 16, 2008

Part I: Munich

Day 1, 2 June 2008: Arrival in Munich

By Yang Tzyh Haur

The 18 of us departed from Changi Airport at around 3.20am in the morning. We stayed in Doha International Airport for about 6 hours before taking off to Munich. We arrived in Munich at 8pm on the same day. On arrival, we were greeted by Prof Englert and a friendly lady called Vava. The weather was cool and cloudy but most of us enjoyed the weather. We were then transferred to our dormitories in Großhadern. All of us remembered vividly how excited Prof. Englert was when he found out that his UROPS student, Yen Kheng was going to share a unit with four from Spain, Italy and France. The 18 of us were transferred to three different dormitories: two in Klinikum Großhadern and one in Großhadern. There were no further activities that night as most of us were already tired. We tried to explore around our dormitory that night but we realized that most of the shops close at 8pm. I guess that was the first surprise to most of us.



Figure 1: This is how it looks inside the station as well as inside the train.



Figure 2: This is a photo taken during the welcome talk by Dean of the Faculty of Physics. We are introduced to the Departments under the Faculty of Physics, as well as the history, recent developments and future plans of the faculty.

Day 2, 3 June 2008: Touring the City

By Kenneth Ong

The first programme in the morning is the welcome talk by Dean of the Physics Faculty. We had to take the subway down to the LMU, Ludwig Maximilian University of Munich, which is located near downtown, some distance from the place that we lived. The ticketing system for the subway in Munich is very different from Singapore's. The most surprising is that there are no gates which you have to insert your tickets or EZ link as in the case in Singapore, before you can enter. The ticket stamping was voluntary (of course there are ticket inspectors as well). Since we had weekly tickets bought, the ticketing machine is useless to us. But, I would not have understood it anyway.

The stations have no glass doors and when the train is arriving, there will be a gust of cold wind coming from the direction of the train. Certainly, it does



Figure 3: A beer garden near Viktualien-Markt

not need to have the “train approaching” warning. But sadly, the train cabins were not air conditioned and it was quite stuffy even if the windows are opened. LMU nearest station is “Universität” which is a number of stops away.

The tour around LMU was quite short as we only visited the most important places like the Lichthof and the Great Hall. We are briefly introduced to the history of LMU as well as the history of Munich which are closely linked together.

After that we went to MENSA for lunch, which is basically the student canteen. We got a mensa card, which is something like an EZ link where we tap to pay for our food. The food here is extremely cheap as compared to outside but somehow the pricing seems inconsistent where people could order about the same food but pay totally different prices.

After lunch, our guides Maria and Julia took us to the nearest U-bahn, where we took the train from Giselastrasse to Odeonsplatz, and from there we were taken on a guided tour through the city center of Munich, where we visited places like the Old Town Hall, Monkey Tower, Hofbräuhaus, Opera House, and much more.

We were back in Schellingstrasse by 6 in the evening to attend a talk on astrophysics by Prof. Lesch. After the talk, some of us went for a dinner at a BEER GARDEN!!!



Figure 4: Some pictures taken in the gallery

Day 3, 4 June 2008: Alte Pinakothek By Kenneth Ong

This art museum houses many of the world most famous artwork. But this museum was bombed during the second world war and the scar of the bombing can still be seen by the different coloured brick used to rebuild the bombed portion of the building.

After the visit at the museum, we had a few hours of free time in the afternoon. Our student guides Max and Eyleen offered to take us to the Nymphenburg Palace. It is a very beautiful place and we can observe different building styles being reflected in the buildings since it was expanded numerous times in different eras.

At night, we have our welcome dinner hosted at Alter Simpl, a nice Bavarian restaurant. There was only one set of menu that is in English, and the rest of us struggled to figure out the items listed in the menu. Bernadette, one of our main organizers, was busy going around helping us translate the menu and giving recommendations (we were thankful to her for that!). The food, beer, is very nice and we feel a very warm welcome extended to us.



Figure 5: Nymphenburg Palace



Figure 6: Welcome dinner at Alter Siml

Day 4, 5 June 2008: Rainy, Talk in the morning and free afternoon visiting English Garden
By Chu Xinjun



Figure 7: Ducks at the English Garden.

The English Garden is one thing which makes Munich such a pleasant city to live in. The English garden, Munich, was first founded in 1262 by explorers Richard Carr and Michael Hings. It was intended to provide the citizens with space to drink and munch on sausages. During the summer, a lot of students from the adjacent university come here to study, play football, frisbee, horse riding, even cricket and surfing on the Eisbach River.

Based on the scene of all eyes of green and peaceful, the English Garden makes every visitor feel like being in a fairyland. Riding a bicycle here is a pleasant thing which makes our busy visiting life comfortable and relaxing.



Figure 8: Left: Surfing at the Eisbach River, Right: Further downstream of the river.

Day 5, 6 June 2008: Off to Garching
By Lim Yen Kheng



Figure 9: A partial view of the Van der Graaff accelerator.

Early in the morning our student guides Max and Eyleen took us by U-Bahn to Garching, where we visited various Max Planck Institutes. We had a tour at the Tandem Van der Graaff accelerator facility. Subsequently after lunch at the Mensa we visited the Max Planck Institute for Quantum Optics, where we had a very interesting talk about petawatt lasers and free electron lasers.

We were lead back to Munich later that afternoon, where some of us used the free time to explore around. Some of us went exploring the city more. That evening, Jing Kai, Tzyh Haur, Peng Kian, Kenneth and me resumed our selfmade adventure of searching for the grave of Heisenberg. It took us a while to locate the Westfriedhof cemetery. However, by the time we found it the cemetery was closed. So we planned to return to the cemetery again early next morning before our visit to the Deutsches Museum.



Figure 10: Visit to the Max Planck Institute of Quantum Optics, with a talk by Stefan Karsch

Day 6, 7 June 2008: Deutsches Museum
By Lee Jian Kuan



Figure 11: A beautiful display in the Deutsches Museum

A day at the worlds famous Deutsches Museum. Prof Englert told us that a visit to this museum is a must, and even so, the day of the visit itself is certainly not enough. True enough, it is really difficult to dedicate a little time for every single gadget or artifact that we passed by. There were intriguing demonstrations of the Faradays cage and electricity, which brings theories learnt in classes into life. I was particularly impressed with the bridging section and the tunneling section, where applications of geotech and civil engineering brought out the fundamentals of Physics in these technologies. Not to mention a walk through seemingly timeless zones of past technology and how mankind got about overcoming landscapes and obstacles with simple technology and Physics. The day spent at the Deutsches Museum was indeed a fruitful and enriching experience.

Day 7, 8 June 2008: The Fairytale Castle
By Lee Jian Kuan



Figure 12: An outside view of the castle, taken from the Marienbrucke bridge.

Schloß Neuschwanstein was simply a dream come true. Pictured in fairy tales, notable Sleeping Beauty, all we had was to only see pictures of it or read off it somewhere during our childhood bedtime stories. Standing on the bridge with this majestic castle right before our eyes was just like a wonderful dream. Amazing is probably an understatement of our feelings as we marveled and drooled over such unique architecture. Quite simply, we felt really blessed that we could visit this castle, for some of us might not even get to see it again. With the Bavarian Alps as a backdrop, the day trip to Neuschwanstein was a timely break from the many enjoyable Physics lectures throughout the week and in the following weeks to come. As an old saying goes, all work and no play makes Jack a dull boy.



Figure 13: A counter recording the total number of experiments.

Day 8, 9 June 2008: Plasma Physics and Jazz

By Lim Jing Kai

Although we claim to be students of Physics, we have only an inferior knowledge of the span and scope of Physics as a subject. When the general public talk about fusion, only a handful of people with some knowledge of it are able to make a vague reference to the power producing process occurring in our Sun and the inability of us to harness that power into good use due to the many disadvantages. However, the visitation to the Max-Planck Institute of Plasma Physics in the morning allowed us to have a glimpse of the advances and scale of Plasma Physics research and equipment. Although research in this field is still ongoing, it was an eye opener to see that we are now able to control to a certain extent the fusion process in the form of plasma and that this experiment has been conducted many times (Figure 13). This visit had definitely made me reconsider the correctness of what was taught on fusion by my teachers back in my younger days.

The later half of the day was dedicated to a talk on Particle Physics. There is not much to describe other than the fact that I'm still very new to the subject and my knowledge of it is still to insignificant to make any logical and conclusive comments.

After the talk on Particle Physics, we attended a Colloquium on "Factorization of integers, Schrödinger's Cats, and Riemann's Conjecture" by Prof Wolfgang Schleich back at LMU. This is our first Colloquium as the first one back on the 6th was "canceled" due to the lack of seats in the lecture theatre at that time. Although we expected the turnout to be as much as that, it turned out quite differently. The lecture theater was only about two-thirds full. In any case, this Colloquium was very high level in a sense that I could only understand not more than half of the things that the professor was saying. Luckily, I'm not the only person who feels this way. Many of us on this GIT group had barely understood the Colloquium due to the unfamiliarity in this field.

After the colloquium, Professor Englet brought us to a beer garden near the place where the Jazz Concert (the last program for the day) was going to be



Figure 14: A jazz concert

held. As the Euro 2008 had started, the beer garden was filled with football supporters from all walks of life, sitting at the makeshift benches in the open area, having beer, food and watching intensely at the match that was broadcast live on a large television set located at one of the sides of the open area. Sitting down at one of the benches with some friends allows you to experience the spirit of the football fans. After a wonderful dinner of beer and sausages, we head down to the Jazz Club located just off Einstein Street.

This Physics Immersion trip is not just about learning academically, it is also about learning and experiencing the non-academic part of the life in a foreign land. Germany is not just about the beers and meat. There are also many activities going on in their daily lives. By attending this Jazz concert, we can see that there are actually many people who also enjoy jazz on top of their beer and sausages. Although this was my first time attending a Jazz concert, I can tell that the setup was very unique since it is held in a bar. However not many people enjoyed the surroundings as they feel extremely out of place in the dark pub they are in. Although attendees for this concert had a ticket, the pub was not able to accommodate the large number of blues listeners. The staff had to move more chairs from their stores. Although I'm not much of a blues fan, the music sounded really wonderful in the hands of the talented musicians on stage.

Jing Kai

Day 9, 10 June 2008: Dachau

By Tan Peng Kian

On the morning of the 10th June, we made our way once more to our gathering place outside E7, from whence we proceeded to the main physics lecture hall to attend a class on electrodynamics. First impression: There were a lot more students than I was used to seeing in a physics class. Second impression: No windows powerpoint. Third impression: Why is the blackboard moving?

Now, the expected observations should have been concerning the physics lecture per se, with the various equations and diagrams and experimental set-ups, which were fairly fascinating. However, what caught my eye was the unexpected twists of the ordinary, which in this case is the blackboard (strictly green admittedly). First intrigue: Chalk. Very much unlike Singapore, whereby chalk is more or less phased out in lieu of marker pens with a tendency to run out of ink mysteriously. Second intrigue: three boards were joined together as one, and increasingly elevated as the former gets filled up. The great intrigue: When the entire combined board is filled up, the lecturer took up a wet cloth and squeegee and started to clean the board. It was not exactly a comic nor very funny sight, but the sheer unexpectedness swarmed us in stunned silence.

Speaking of silence, we were introduced to another method of being an appreciative audience, when after the experimental demonstrations, the hall was rattled as the local class tapped their desks with their knuckles. A practice that might develop a following back in Singapore...

For the latter half of the day, we paid a visit to the town of Dachau, specifically a former Nazi concentration camp. Many if not all of us have read or heard stories and histories of the second world war and of the Holocaust. We have been saturated by Hollywood war movies, tales of battle glory and gory, and perhaps to too many people, the sights and sounds of the Dachau site fail to impress. But words and photos fail to convey the absent dead, as we gaze upon the empty halls of beds. As I stood upon the soil where once thousands toiled to death, I took home a lesson borne not of fun nor yielding any economic value, but far more solemn and important to us: Never again.

Day 10, 11 June 2008: The Royal Palace

By Ng Tien Tjuen



Figure 15: The Residenz

The Residenz is the former royal palace of the Bavarian monarchs in Munich. The palace was severely damaged during the second world war, but most of the parts were restored.

The architecture and treasury are the most interesting parts inside this palace. The collection of royal jewel, for example ceremonial swords, crown, ruby jewelry and etc is so amazing. Every important part of the building was carefully explained by a local tour guide. We get to know more about the Bavarian history.

After lunch, student helpers Max and Eyleen took us to Olympiaturm or Olympic Tower in Olympiapark. The tower has an overall height of 291m and at a height of 190m there is an observation platform. At the platform, we saw the Olympic village, stadium, BMW museum and headquarter

and etc. The weather was cool and windy. The scenery was great, we took a lot of beautiful photos.

The cool weather was followed by a rain while we were on the way to have our dinner at Pizza Hut. Instead of enjoying the delicious pizza, we actually missed the spicy or the chilli food that we have in Singapore. Our student helpers were shocked of our passions towards the chilli powder. We had a very nice chat and a lot of fun.



Figure 16: The Olympic Tower



Figure 17: Top: Olympic Stadium, Bottom: BMW Welt, Museum and Headquarters



Figure 18: A piece of artwork on display outside the Buchheim Museum

Day 11, 12 June 2008: Visit to the Buchheim Museum By Goh Jing Qiang

We had a special visit to Buchheim Museum which is located north of Bernried, on the banks of Lake Starnberg. The visit was kind of special in the sense that we had great experience by taking boat from Starnberg to Bernried. All of us enjoyed the boat ride as we could feel the cold breezing of wind and had beautiful sight seeing.

The crew on boat also introduced the histories of Lake Starnberg to us. Other than the fact we learnt that King Ludwig II of Bavaria died at the Lake Starnberg in the year 1886 (see Fig. 20), we have also been told about the statistics of the lake (dimensions) and etc. But I think most of us could not really bear in mind with all the figures and would rather enjoy the beauty of nature instead. That boat ride took around 1 hour and we reached Bernried around lunch time.

When we reached the Buchheim Museum, we were impressed by that building. As some of us might not expect that Buchheim Museum building is of a luxurious private bungalow styled. Probably that building is designed in a unique way to reflect the diversity of arts collections by Lothar-Günther Buchheim. We also found some creatively designed models outside of that museum. Probably these models would like to remind us of the artistic and abstract senses that we would learn from the arts collections at museum.

We had a professional tour guide with us at Buchheim Museum. I remembered she first gave us a short but clear biography of Buchheim that we learnt about Buchheims identities and his interests. Buchheim was a legend that other than his various identities as painter, photographer, author etc. he also had mas-



Figure 19: Other parts of the Buchheim Museum



Figure 20: The part of the lake where King Ludwig died

sive arts collections from different countries. During the tour, we also had the chance to learn more about different schools of artists like naturalist and etc from the tour guide. She also enthusiastically shared with us about the drawing techniques used by the artists. Together with the arts collection by Buchheim and her clear presentations, I would say it was a good artistic lecture which offered a new window for most of us as typical science students.

Around 5:00p.m, we finished our tour at Buchheim Museum and took boat back to Starnberg. Coincidentally, that evening was the Euro cup match between Germany and Croatia. When we backed we headed to beer garden in Odeon-splatz and enjoyed our dinner and the Euro cup. Though Germany lost to Croatia with the result of 1-2, but it was great that we shared the excitement and passions by Germany supporters to their favorite team.

Day 12, 13 June 2008: Alice and Bob

By Lim Yen Kheng

This was the final day of the Munich part of the programme. We met as usual at the foyer of the Physics faculty building where Max and Eyleen took us into a seminar room where we were given a talk entitled “Practical Quantum Cryptography” by Tobias Schmidt-Manderbach. After the talk we were taken to the rooftop of one of the buildings of LMU where we were shown one of the quantum cryptography experiments they were conducting.



Figure 21: Our farewell dinner

After the talk, the rest of the schedule was free until the evening farewell dinner. So some of us used the free afternoon time to explore Munich one last chance before we leave for Göttingen, while others went shopping for souvenirs. I managed to do both, buying some small souvenirs in Marienplatz, then walked around to Maximilians Platz, then to Hofgarten in Odeonsplatz, taking pictures.

At about five in the evening, everyone involved in GIT-Munich met at Münchner Freiheit, a U-Bahn station towards the north of the university. It

was near one of the exit points from the English Garden, and there were many shops and restaurants around that area. There we were taken into one of those nice restaurants for our dinner party, and thus begins one of the most memorable nights of our trip.

Everyone was present, from Dean of Physics, Prof. Englert, our four student guides, and Bernadette (I heard that she was responsible of much of the planning and administrative work of GIT). Max and Eyleen gave a short thank you speech to everyone - they said they had as great a time as we did - and even presented all 18 of us presents! Bernadette helped us with the food orders again, and we were served with fantastic food.

We spent the rest of the evening chatting with each other, and generally having a good time. Later in the evening we even played some simple party games, and we stayed until close to midnight, where we finally left for our hostels to pack up and prepare for the train ride to Göttingen the following day.



Figure 22: Good times at the farewell dinner



Figure 23: GIT08 Munich

Part II: Göttingen

Day 13, 14 June 2008: Arrival in Göttingen

By Lim Yen Kheng

After nearly three hours of train ride, we finally arrived in Göttingen late in the afternoon. Prof. Osipowicz was at the train station to meet us, and he took us by bus to Hotel Zum Weißen Roß, where we checked in. There weren't any more programs for the day, since most of us would be tired from the train ride. We walked around and explored the area near the hotel.

It is worth mentioning that we quickly discovered our favourite eating place in Göttingen. It is a Pizza shop just beside the hotel. We had dinner almost everyday there while in Göttingen, and almost each time we had their delicious fried chicken wings...



Figure 24: A sea of bicycles parked at Ostbahnhof



Figure 25: Left: Hotel Zum Weißen Roß; Right: Our staple food while in Göttingen.



Figure 26: The Goose Lady of Göttingen

Day 14, 15 June 2008: The Old Town Hall By Goh Jing Qiang

That was our first morning after arrival in Göttingen from Munich. We first gathered at Altes Rathaus town hall waiting for our first Göttingen City Tour. Before the exploration of Göttingen, the tour guide had introduced the Altes Rathaus town hall itself to us. The town hall was a meeting place for noble people to discuss some important issues regarding policy decisions in the past. She also shared with us the facilities owned by the town hall. For instance, beneath the ground of the town hall, during old time people could burn woods to warm the indoor room which had holes on floor. Another impressive fact is the size of the doors key! We were impressed by the size of doors key which is bigger than our palm and is still used up to date.

We were later introduced the overview of Göttingen by the tour guide. We learnt that Göttingen is famous of its unique university town status. Over the decades, a number of Noble Laureates and leaders of academic engaged to this university town. For instance, Prince of Mathematics Gauss, Uncertainty Principle Werner Heisenberg and etc. had been in Göttingen. Other than its glorious background of those leading people of academics, there is one interesting statue in Göttingen is the Göttingen's Goose Girl. People said that it is a tradition for every Göttingen Phd student to climb up and kiss the cheek of the Goose Girl after his graduation. And thus, here in Göttingen we found the lady who was offered the most number of kisses by Gentleman all around the world.



Figure 27: Left: The heating air will flow upward through the hole and warm the room. The round cover is beside the hole. Right: A huge key to a safe that secures the city's important documents.

That city tour though was short but we managed to learn the unique status of this university town. Due to unique background and the culture developed over the decades, Göttingen is said to have these encouraging factors that promote the high quality tertiary education and research study. We were expecting to explore more about this university town in the following days.

Day 15, 16 June 2008: couldy, visiting the labs in physics department, telescopic view at 23:00

By Chu Xinjun

1:0 GermanyAustria (Europe Cup Football Game)



Figure 28: The Physics Department Building, which is by a beautiful lake.

This is the new building of the department of physics, which is one of the most famous departments in the Georg-August University of Göttingen (founded in 1734 by George II). Sitting in front of a beautiful garden, the department makes people feel pleasant to study there. Equipped with the world leading TEM, ion-beam writing system, STM and other research equipment, this department has achieved great amount of research results. In the photo, our group members were chatting with the cute student guide (Julian) about the German football team which would play at the night of that day.

With the exciting feeling that the German football team won the group game of Europe Cup, our group visited the telescope at the night to have a close touch with the astronomical bodies such as the Jupiter and the moon. Though the telescope was built for the students, it had a large resolving power, and gave us a shocking impression of how beautiful the planets were and it generated our interest in cosmic physics.

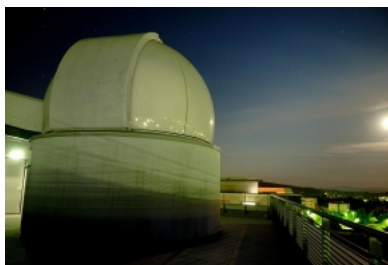


Figure 29: The observatory on the rooftop of the Physics building.

**Day 16, 17 June 2008: A visit to Hannoversch Münden and
Schloss Adelebsen**
By Yan Yuanjun



Figure 30: Hannoversch Münden, viewed from the top of Adelebsen Castle

The town of Hannoversch Münden is located in the district of Göttingen and is famous for its old houses. When we got off the bus, we actually got off 21st century and walked into a 12th century old town. Rows of red houses emerge themselves in the endless green, which brought you a feeling that can never be more fresh and pure.

The Schloss Adelebsen, once the house of a very rich family, is still very well preserved in its original form. Why? Like 900 years ago, it still has a master who loves it and treats it as his everything, although it looks quite old now. We all had the honor to visit this tower, go up to the roof and have very nice bird view of Hannoversch Münden. After that, we were all surprised that we had been invited by the master of the big house, a nice gentleman, to delicious cakes, coffee and soft drinks. We couldn't wait to snap the moment. Behind us was the wall of the building, which the master is most proud of.



Figure 31: Our group photo with Count Adelebsen.

**Day 17, 18 June 2008: Talk on Particle Physics and tour
of the accelerator hall
By Wee Kin Guan**



Figure 32: Prof. Quadt giving the particle physics talk

Today we attended a talk on Particle Physics by Prof. Quadt in Georg-August-University. The talk was interesting and broad-disciplined enough to draw our attention. In this lecture which lasted 1 hour 30 minutes, we learned a lot of things on particle physics and how the Large Hadron Collider (LHC) in CERN will change our view on the most fundamental building blocks in the universe.

Later we went to the accelerator hall in the university to have a look at the accelerator. It breaks the stereotype of a boring, cold scientific facility. The colourful images and wild drawings on the walls has given us laughter when we stepped into the hall. Prof. Uhrmacher, who looked like Santa Claus in our humble opinion, kindly showed us around and explained how this accelerator worked. Although I was not quite sober at the time, maybe due to last night drinking, I learnt a lot and had an understanding on how the knowledge in the book applies to our real life.



Figure 33: The accelerator facility, those wild drawings can be seen on the wall behind.

Talk on High Energy Physics

By Chen Yu

I find that everywhere we go, either in Munich or Gottingen, the professors there are talking about LHC, talking about ATLAS. Yes indeed this year and the next few ones will be very crucial for experimentalists, as the biggest accelerator that has ever been built is going to be in operation in the end of this year. Many collisions with extremely high energy between either protons and protons, or anti-protons and anti-protons or whatever will take place in the chamber of the accelerator. The results that will come out will touch the foundation of theoretical physics too. As some experiments that will be performed in LHC are designed to search for evidence for the existence of the Higgs particle, which by a certain Higgs mechanism gives mass to elementary particles. I am particular interested in this Higgs field. One of today's lectures is on this topic. The professor is an experimentalist who is the director of the accelerator in Göttingen University that we have visited. The talk was a very good one. I really enjoyed it. Actually this is one of the few talks that I can understand something and that I am interested in.

Day 18, 19 June 2008: Low-temperature and semiconductor physics. Solid state physics using ion beams
By Tay Young Soon

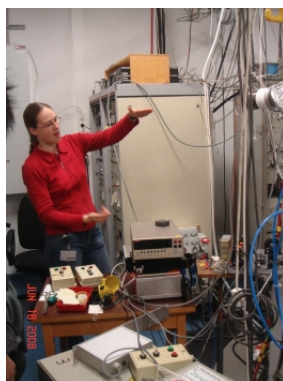


Figure 34: Low temperature physics lab

This is a very exciting thing to visit a low temperate lab in Germany; all of us are looking for it for a long time. One of the lab introductions was conducted by a female researcher in there, what she has done is really impressed me. In her demonstration, she twisted a piece of metal (if I haven't got it wrong, it was copper or aluminum) and then she heated the metal piece, the metal piece would recover to its original shape! In the other room, we also had a briefing about the microscope which is dependant on the scattering of ions. This is really amazing to have this kind of experience since in Singapore, this kind of research institute are much less common than in Gremany. After we had finished the visit in the



Figure 35: The tombstones of Max Planck and David Hilbert.



Figure 36: Kissing a fake Goose lady.

Institute, it is become our free time to looking for the hot spots in Germany! Are you wondering what that is? Ya, brilliant! It is the graveyard. Seemed looked like all of the famous people in physics, half of them are really German or lived in there, it is a hard for us not to give our respect to them. Today, our task to find the tombs of Weber, Max Born, Felix Klein, Karl Schwarzschild, Max v. Laue, Otto Hahn, Max Planck, David Hilbert. Really appreciated what the senior had done for that, they had spent a lot of time to locate all these physicists and visit them without like making fun but really show their respect to them. By the way, I think I better buy a place in there so when I become famous I can bury myself beside Max Planck and get visitors too.

After that we have go to visit the City Museum in Göttingen, and I lost my first kiss in there!! ! There is a custom for all graduated student, they have to kiss a girl sculpture in the city centre. In fact, this is a same size sculpture placed the museum. Can't stand until my graduation in NUS, I kiss her immediately, haha.

After that, we had end the day by watching the Euro Cup in our hotel, go go go, oleh oleh oleh!



Figure 37: Otto Bock Memorabilia

Day 19, 20 June 2008: Otto Bock **By Shreya Dilipkumar Shah**

We were coming to the last session of the program in Göttingen. It was 20th June, 2008 Friday and we had to visit Otto Bock Company. We left our hotel at 8:30 am and we left for Otto Bock Company. This company has been established in year 1919 by the prosthetist Otto Bock.

Otto Bock is a very famous and popular company now-a-days. This company manufactures artificial masks, legs and hands made from special polymer and carbon. This company is really huge one. Branches of this company are spread worldwide like India, China, Singapore etc. In 2007, sales increased to 457 million euros, this constitutes a currency-adjusted organic growth of 9.1 percent. Fulltime employees increased to 3,730 at balance sheet date worldwide. This company gives the best example of Science and Technology. We visited this company and we got very great impact in our minds. Lunch was provided there itself. We were very grateful for getting good hospitality there. Then we returned back to hotel around 2 pm. And we were free now so everybody was roaming according to his priority.



Figure 38: Material for prosthetic limbs, poured and frozen in a plastic cup.

Day 20, 21 June 2008: Last Leg Home

By Lee Chee Kong

I woke up as early as 7am to pack my stuff and prepare to go back to Munich. After having our breakfast, we left the hotel at 9.00am. We reached the train station at around 10.00am. We arrived early to avoid any unforeseen circumstances. Since there was plenty of time left, we talked to Prof. Thomas for quite a while, topics including careers for a physics graduate and possibility of attending graduate school in Germany. Prof. Thomas also treated us a drink. We left Göttingen at 11.03am.

We reached Munich at around 3.00pm. Vava (not sure if it is the correct spelling) helped us checking in at the Easy Palace City Hotel, which is very near the train station. After checking, we were free to go around the city and get some souvenirs. I went to the newly-open BMW museum. It had undergone major renovation. Because that was the opening day, I saved the twelve euros entrance fee. After the museum, I went to restaurant with a friend to have my last dinner in Munich. The food and beer were great, though a little expensive. We then walked around the city centre. We went back to the hostel at around 12am.

Acknowledgements

First and foremost we would like to thank Prof. Berthold-Georg Englert and Assoc. Prof. Thomas Osipowicz for taking care of us while in Germany and for their hard work and effort in putting everything together in making GIT-08 possible.

To our Munich friends, special thanks goes to the staff and students of LMU, in particular Prof. Dr. Axel Schenzle, Bernadette, Max Landthaler, Eyleen Schneider, Georg, and Dominik.

To our friends in Göttingen, special thanks goes to the staff and students of GAU, Dr. Michael Uhmacher, and Julian.

We highly appreciate the wonderful experience that we had in our three weeks in Germany. We have learned many new things, met new friends, and visited interesting places. It was certainly an unforgettable trip for us!



Danke schön!



(All photos taken by GIT-2008 group members.)