

CFHEP Arrival Guide: Physics Mission in Beijing

Here is an informal impression of what our mission is coming to Beijing

1. give some lectures to students here, exposing them to what we think is important, giving them a starting point to learn more about various topics that they otherwise wouldn't have easy access into
2. meet the convenors of the local working groups for the 100tev/lepton collider effort. Talk to them about what you think is important, be a contact person if they have questions, provide sanity checks, point them to important past work they can base their reports on, etc...
3. your presence is a show of international good faith for the collider effort
4. work on 100 tev / lepton collider related projects and provide some fodder for the CDR that comes at the end of the year.

There's a mailing list for local activities: cfhep_activities@lists.uchicago.edu

You can email information about your lectures to this email list, and you should ask Haipeng to include you on emails for local activities etc.

NOTES ON GIVING LECTURES

An important piece of information: many students do not speak good english. It may sound trivial, but this means you should adjust your language. Speak slowly (60% normal) and clearly. Make your sentences short, no spoken commas, so to speak. It'll sound weird to you, but it's super helpful to them.

Some Informal Guidance on the Working Group Reports

I (Joe B.) had some questions regarding what the exact format and goals of the working report were, so I asked the very active and friendly convener of the Monte Carlo and Non-SUSY BSM working groups, Qi-Shu Yan.

He responded with some good information for those CFHEP members interested in contributing directly to the report, and agreed to have his response posted here.

Note that below, he's addressing the question of under what circumstances and how contributions from non-CFHEP colleagues may be incorporated into the document.

As we can image that there will be three stages for developing the report: 1) pre-CDR[which should be done within this year], which, in terms of comments of Nima, is supposed to address the most fundamental issues of the SM and argue why 100 TeV collider is necessary; 2) CDR[which should be done within three years upto 2016], which can have more concrete materials to backup the physics cases mentioned in pre-CDR in great detail; 3) TDR[which should be done within 8 years upto 2025], which should have original and more realistic works.

To move forward and make the task easy, we can start from CDR, of which an executive summary can provide sufficient material for the development of pre-CDR. For CDR, we can review our colleagues' work as motivation for 100 TeV colliders, it might be even better if we can have some original ideas and work.

As you said, we can include their plots or figures in the review if our colleagues are willing to join and sign up their name as coauthors. In the case they are reluctant to do so, we need to redraw those plots.

As a side note, if you're interested in this sort of thing, just contact a working group convener. They'll be happy to bring you on board.

CFHEP Arrival Guide: Living in Beijing

*Foreword: this started as a PDF on the CFHEP website by Joe Bramante, who was the first person to arrive here. It has since considerably expanded. **Please share this google doc with other people who have visited CFHEP in the past or will in the future!** You can export this document as PDF and email it to chenli <chenli@ihep.ac.cn> to update the document on the website.*

Also, don't let this stuff scare you. By necessity, this document focuses on information that helps western scientists deal with some of the differences between living & working in Beijing vs USA. As with any workshop, if you're here doing good work and are here with some good people, then you'll have a great time. Being a tourist in Beijing & surrounding areas is awesome, and the food is usually nothing short of divine.

Some Tips by Joseph Bramante:

I decided to write up a short guide to arriving at CFHEP (geared mainly towards non-Chinese speakers). This document should serve as a nice supplement to the New Arrivals and Transportation web pages of the CFHEP website.

If you have any further questions, I'd be happy to field them, just email me at jbraman2@nd.edu.

<http://cfhep.ihep.ac.cn/new%20arrivals%20guide.htm>

<http://cfhep.ihep.ac.cn/transportation.htm>

Arriving in Beijing

-Be sure to print out both both the Chinese language directions and the map of IHEP and Jinding Hongtai Hotel to show the taxi driver. The taxi driver won't necessarily know exactly where the hotel is without the map. (<http://cfhep.ihep.ac.cn/transportation.htm>)

-You can get yuan at the airport near the checked baggage carousel. Keep in mind that you'll need at the very very most 1000 yuan for your first day, and the institute will be handing you an envelope with ~1300 yuan per week when you come to their office, which is far more than enough for food and expenses.

-The cab ride will cost around 150-200 yuan (\$20-30) depending on traffic.

Updated: they don't ask for the deposit anymore -The hotel will want a 200 yuan deposit (remember to get and save your deposit receipt). The room should be covered by the institute, and the hotel should have your reservation on file.

-If you don't speak Chinese, download a few Mandarin phrasebooks onto your smartphone before you arrive. These will be invaluable. The staff at Jinding Hongtai hotel do not speak English.

Getting to IHEP on Day One

-The map of IHEP from the website works, just go South (take a left as you exit Jinding Hongtai) until you hit the main street, Yuquanlu, then go East (take another left) and walk about five minutes. The entrance to campus is pictured below.



-Walk North and left around the front building shown above. As you continue North, you'll see this conspicuous bit of electric machinery. This is in front of the entrance to IHEP and CFHEP.



Upon Entering IHEP/CFHEP

-Come find other CFHEP members up the stairwell to your left and on the second floor (we're in even numbered rooms 204-212). Alternatively, if no one is around but it's normal business hours you can go see Li Chen in room 203, and she will sort you out with a dining card, room key, and building passcard.

-The dining card can be filled with yuan from 11:30am-12:30pm on weekdays at the dining hall entrance. The dining hall is down the street to your right as you exit IHEP, and has some swirly art in front of it. There is a picture below.

Welcome!



A few other items of note:

Power Adapters:

If your device is 2-pronged and can take 220v input, you're set for both the hotel and IHEP. Otherwise you will need to bring along power adapters. American 3-pronged won't fit without an adapter to 2-prong.

Laundry:

The hotel has no laundry and there are no laundry shops nearby. Laundromats do not exist in Beijing.

The following business has sprung up as a result, and I strongly recommend that you either pay the ~\$30 to get laundry done through this service, consider hand washing your own clothing, or bringing enough clothing that laundry is not an issue.

www.laundrytown.com

The website indicates we're out of range, but for a pickup/delivery charge of 40 yuan and 20 yuan/kilo, they'll come get your laundry from reception and deliver it back to reception. Also the owner speaks perfect English.

Update by David Curtin: they know us by now, just call them, tell them your hotel and that you're friends with Joe, and leave your laundry in a plastic bag by the reception with an envelope in the bag containing 300 RMB (to be safe, probably need at most 200). They'll pick it up & deliver it back with your change + receipt in the envelope. Very simple.

There is also a laundry shop on the CFHEP campus, but they do not speak English and as far as I can tell charge ~\$2-3 per item (which is about double the rate of laundry town for jeans, and much more expensive for shirts, etc.). I think they dry-clean everything? If someone finds out, add it in here.

A few notes on HYGIENE:

Think of being in Beijing like camping. Many/most of the bathrooms don't have TP or soap. When you're out and about in Beijing, carry a roll of TP and some hand sanitizer with you.

There are western toilets at the institute, but sometimes the above rules apply there as well!

DO NOT DRINK THE WATER FROM THE TAP! Buy lots of bottled water to keep at the hotel (small shops everywhere sell it cheaply)

At the institute, potable water is available from the 3rd floor room with the espresso machine.

Note on bathrooms at Jin Ding Hong Tai Hotel:

some showers have an auxilliary water tank. this may confuse you. The main line has fine hot water, but apparently the tank is a backup for a privileged few hotel rooms. just use the normal mainline.

Printing at CFHEP

There's a printer in the 'reception' office. It does double-sided. Printing is supposed to work by Wifi but sometimes that doesn't work. Just plug the USB into your laptop to print if that's the case.

Notes on Air Quality from David Curtin:

Hello fellow CFHEP'ers,

if you're anything like me then the visceral feeling of breathing in pollution has been giving you some anxiety. (I'm aware that some people deal with this better than others, but I found it very distracting.) However, I thought I'd share two pieces of info that provided an important reality check for me and set my mind at ease.

1. You can monitor beijing's air quality in quasi-real-time here:

<http://aqicn.org/city/beijing/>

This also explains how they gather the data using different sets of instruments, how indoor vs outdoor pm2.5 levels are correlated, etc. This gives you some numbers to understand. For the few days I've been here, the pm2.5 levels are between 100 and 250 $\mu\text{g}/\text{m}^3$, and on the higher end of that you don't see blue sky anymore.

2. As I was reading up to understand what these numbers mean I entered a period of brief paranoia about all those tiny particles entering my blood stream and my BRAIN. However, an important reality check is provided by comparing with a different well-understood example: smoking cigarettes. This site has a wonderful calculation about comparing pm2.5 exposure to smoking cigarettes:

<http://www.myhealthbeijing.com/china-public-health/a-day-in-beijing-is-like-smoking-only-one-sixth-of-a-cigarette-its-almost-disappointing/>

Of course it's not quite the same thing (maybe different pollutant mix etc) but given how bad smoking is, it's probably a good rule of thumb. The bottom line: if you spend 24 hours breathing in air with a pm2.5 level of 250 (a bad day) that's equivalent to about half a cigarette. So a month in Beijing will amount to about half a pack of cigarettes (probably significantly less).

So we can all relax. (Or, if I was the only one worrying about this, just me. I'll stop complaining now. :))

cheerio,

David

Notes about the Hotel and other reminders from Adam Martin:

- if you go to the network tab: <http://cfhep.ihep.ac.cn/network.htm> and fill out the form, you can get your laptop approved for wireless before you arrive.. if you dont, you have to wait for it to get approved by a staff member here at the institute (exactly like visiting CERN)

some other details:

- the taxi drivers are not expecting a tip!
- standard 2-prong US plugs works in all outlets, though the voltage is different.
- hot water in the hotel apparently turns on at 7am. So if you are up early from jetlag and looking to get an early start to the day, its gonna be cold.

- internet in the hotel: any JDHT#### connection should work. the password is JDHT8888

- though the internet should work, it rarely does. the only way I can connect is via an ethernet cable that happened to be in my room. you might want to bring along an ethernet, or ask at the front desk when you arrive (also, if you test your connection by going to nytimes.com as I am in the habit of doing, you will _always_ think your connection isnt working)

NOTES ON BEST TO HIKE THE GREAT WALL BY YUHSIN TSAI

get to Dongzhimen 東直門 bus station about 8am by taking the subway. (From Youquanlu it takes about one hour, or you can take a taxi there). Be sure to bring your lunch (buy snacks at the shops the day previously), you'll be eating it on the wall :)

get 980 bus to "Mi Yun : Tai Yang Chia Yuan" (密雲 太陽家園站) station (means the house of sun in chinese). I think it's 15 RMB each way. busses go VERY often, every few minutes or so on weekends.



The bus will get on the highway very quickly, and when you get off the highway, prepare to get off the bus. The place where you get off is marked with a red pin in the north-east of Beijing in this map:



When you get off the 980 bus, there's lots of drivers waiting for customers. hire a taxi for the day (4 people = 800 RMB for the car, 2 people = 600 RMB for the car)

Tell the driver:

“Please take us to the east gate of Jingshanling Chang Chen (金山嶺長城) and pick us up ~5h later from the Jinshan Hotel ticket check. After you pick us up, please take us to the Miyun main bus station so we can get the 980 bus back to Beijing.”

Here is the above in chinese for you to show to the driver:

請帶我們到金山嶺長城公園東口。5 小時候到西口的金山嶺售票處接我們，並送我們到密雲巴士總站坐 980 的車回北京。

It's a 1.5 hour taxi ride from bus drop-off to the east gate.
You can get the 980 bus from Miyun back to Beijing.

Here is a map of the great wall, with taxi drop-off (A) and pick-up (B) locations indicated. This might also be helpful to show to the driver.

After you climb the stairs to get to the wall you'll turn right to walk west along the wall. A few hours west of your starting point you'll see the point where you would walk down to meet your driver -- it's a plaza with the statue of a horseback-riding chinese general and a few cannons pointing north. However, it's best if you keep walking west for as far as you can -- you'll hit a barrier with razor wire at some point and have to walk back, but you'll get the pleasure of walking on some very un-restored parts of the wall, great ruins.



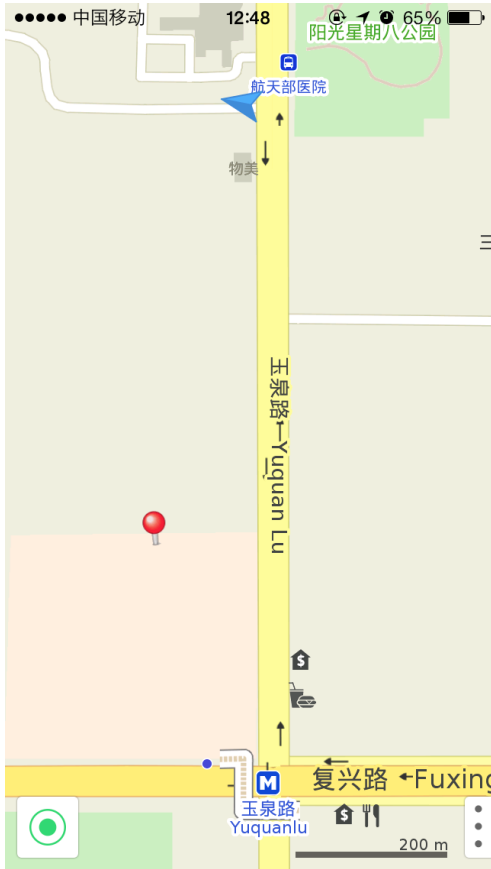
Just in case it's useful, here's the business card of the driver that took care of us for the day:



NOTES ON GETTING A MOBILE PHONE SIM CARD IN BEIJING

by David Curtin & Yuhsin Tsai

Buying a prepaid SIM card in Beijing legally requires a chinese citizen ID, so foreigners can't get one, strictly speaking. Here's how to get one on what we can only assume is the 'black market', so to speak.



See map to the left: If you walk out of the east entrance to CFHEP (red pin), turn left and walk on the same side of the street for ~ 5 minutes. Look inside the little shops until you find one that sells mobile phones (blue arrow), opposite the edge of the park.

You can get a prepaid SIM with ~ 100 minutes of voice, 1000MB of 'night time' data and 300MB of 'day time' data for 75 RMB (about \$12). (If you go over any of those limits you have to buy more credit for 50 RMB).

Just ask for this thing:



Here's the back (the sim card has been cut down to 'nano-sim' size in a little clipper type gadget, to make it useable in e.g. the iphone 5.)



Once you buy the sim you have to activate it by dialling 10086, then pressing extension 5.

If you need to buy more credit, go to the store, show them the above picture of the sim card, and show them this text:

我要充值SIM卡

("I want to recharge this SIM"), it should cost 50 RNB. To apply the credit after you buy it. dial 13800138000 and follow the prompts (you can select an english language option).

Good smartphone apps to install before you arrive:

For Iphone:

MapsWithMe [offline map of beijing with ENGLISH LABELS where possible]

SayHi [if you have data -- basically a star trek universal translator]

VPN Express [reasonably reliable VPN for iphone, a few bucks per month]

PAID VPN ACCESS THAT WORKS FROM BEIJING

Many commercial VPN services don't work in Beijing since the chinese firewall bans OpenVPN, and many institutional VPNs are very slow.

Here is a commercial VPN provider that costs \$6 per week *and their website is accessible from behind the firewall*:

<http://www.surfbouncer.com/>

They'll send you an email with setup instructions about 24h after you sign up. Scroll to the very bottom of that email and setup L2TP or PPTP connection (the other stuff won't work). This VPN is very fast and reliable.

Update: Another option that worked while I (Joe) was there was vyprvpn: <http://www.goldenfrog.com/vyprvpn>. It's around \$15 a month, also accessible from behind the firewall, and has an easy interface with a lot of servers and encryptions to choose from. I recommend buying the "medium" option, which lets you use all their different encryption options. They also have a free trial period.

NOTES ON CHANGING RMB TO USD

you can exchange local currency from your reimbursement to USD at ICBC bank, which is opposite IHEP. *Bring your passport!*

Update: (Joe) The maximum amount of RMB exchangeable by a single foreigner is \$500, so if you're going to change out more than that, just walk from one bank to the next. Alternatively, the group could pool RMB and ask a nice Chinese citizen to exchange a bunch of it? There are at least three banks within walking distance. The construction bank across from the East gate had the most US dollars on hand (not an issue if you're a non-Chinese citizen, since each can only change out \$500 for you).

Usually there's a designated English speaker at each bank whom they'll bring out when they figure out you don't know Chinese.

Update (David Curtin): when I went, the above procedure took 1h to get 500 USD. If you can find a friendly chinese citizen to help out that would be a lot more feasible. Alternatively, we should ask CFHEP to reimburse flights in USD cash.

COFFEE

The institute has an espresso machine on the 3rd floor. Before you leave you should see Lei Dang and tell her how much you drank per day roughly so you can contribute to the coffee fund.

Sometimes (weekends, public holidays, very early mornings etc) the espresso machine is locked away in a cupboard. For those emergencies, you can get coffee (and delicious pastries, a good breakfast option) at a bakery on the opposite side of the street from the east entrance to CFHEP, a bit further towards the subway station.



Breakfast guide by Spencer Chang

For those tired of the Hotel's breakfast and/or interested in a traditional Chinese breakfast, there are a couple of good options right across the street from the hotel. As you walk south on Yu Quan West Road, there are a couple of stands on the right. For those concerned with eating street food, one should always be careful, but if the food is prepared fresh and is hot and you aren't too concerned about the cleanliness of the stand, I think your chances of getting food poisoning are very small.

The first stand has on offer steamed buns with meat filling (bao zi) as well as a set of Chinese porridges and stews. For 2 yuan, you can get doufunao (literally tofu brains) which despite its name is soft tofu served with a slightly sour and spicy sauce on top (see the following post for more details). There are also meat filled steamed buns called bao zi (5 yuan for 1 steamer basket), rice porridge (mi zhou), hot soy milk (dou jiang), and fried crullers (you tiao). All are available to go (in chinese: da bao).

Of these, I recommend the tofu brains and the steamed buns.



Pictures of bao zi (left) and doufu nao or tofu brains (right)



You tiao (left) and soy milk or dou jiang (right)

Since this stand has so many options, it can be difficult to order things if you don't know Chinese. It might help to have the pictures here to point to or you can be more proactive and open up their pots and just point to the one you want.

More information.

<http://intothemiddlekingdom.com/2012/08/30/tofu-brains-%E8%B1%86%E8%85%90%E8%84%91-doufu-n%C7%8Eo/>
<http://www.lonelyplanet.com/china/travel-tips-and-articles/76429>

The second stand has jian bing, which is a savory Chinese crepe for 4 yuan (usually you pay the person sitting down, not the person making the crepe). It is filled with an egg, hot bean paste, a crispy cracker, and cilantro. It is one of my favorite street foods in China. It will be made to order and put in a plastic bag so that it is easy to eat on the walk to the center. Since they don't offer anything else, this is easier to order than at the other stand.



Picture of a jian bing

More information...

<http://www.theworldofchinese.com/2012/03/jianbing-a-guide-to-china%E2%80%99s-favorite-street-food/>

A video of a jian bing being made

https://www.youtube.com/watch?v=2iOi_Asqn0A

Addendum by David Curtin:

There's a bakery (Wedome) by the subway station, opposite the east entrance of the institute (see map below). It sells drinkable coffee and lots of *pastries*. You should try the *portuguese egg tarts*. They make an extremely delicious and cheap breakfast. Just grab a tray and tongs and pick out what items you would like.



One or two stores south of the bakery there's a place that sells *chinese crepes* out of a side window for 6-8 RMB. Savory and delicious. If you go inside you can order *soup dumplings*, which is a common breakfast food in China. Also excellent.

For the crepes, look for this sign.



<http://blog.clarknielsen.com/chinese-snack-shou-zhua-bing/>

A FEW RESTAURANT SUGGESTIONS FOR DINNER

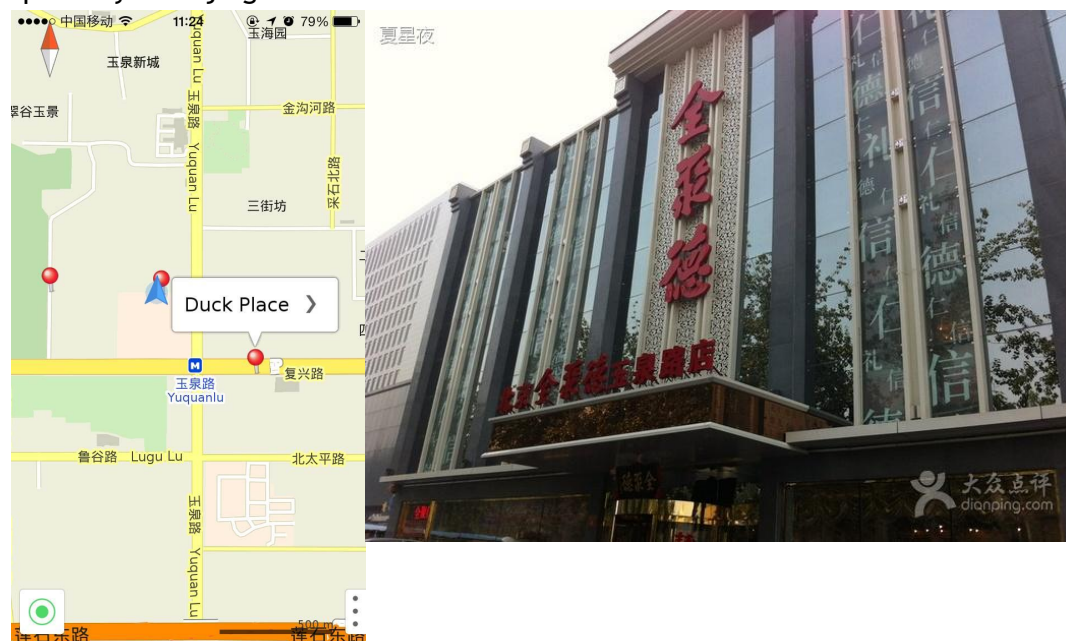
These have been verified as both affordable and delicious. The menus have pictures, so a **chinese speaker does not have to be present** for you to order and have a good meal (one option is to take pictures of the items as the menus tend to be quite long). Menus are typically laid out with pricier, specialty dishes at the front, with vegetable dishes typically towards the end. Remember, there is no tipping in China.

In terms of finding things on your own, check out the local Yelp-like website dianping. Check out the following link to get started. If you use Google Chrome, the translate option works okay with the site. Look for the map button (地图) which will allow you to search near the center or other areas in town.

<http://beijingfoodbible.wordpress.com/2012/03/31/where-do-beijingers-eat-a-quick-dianping-tutorial/>

Places near to Center - also listed in visitor's guide

There's a good restaurant right by Yuquanlu subway station, a few minutes from CFHEP. The name is Quanjude 全聚德, but it's the "Duck Place" (they are very easily recognizable as such). In the below image, the red pin next to the blue arrow is the institute). There specialty is Beijing Roast Duck.



<http://www.thebeijinger.com/directory/quanjude>
<http://www.dianping.com/shop/510671>

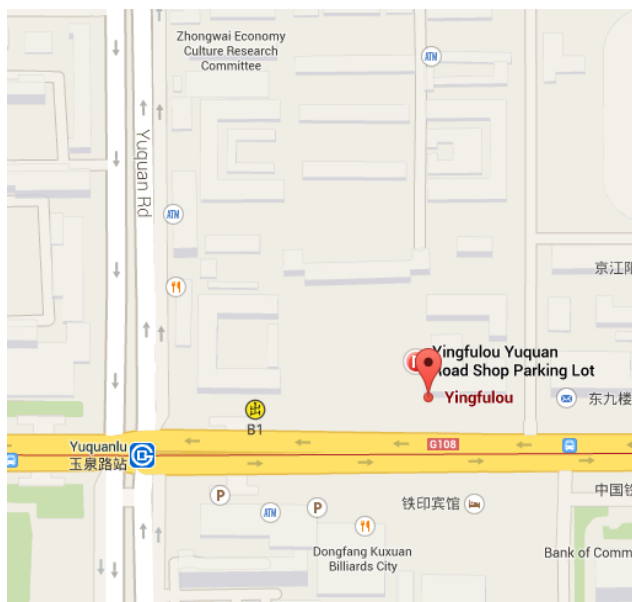
There is a restaurant specializing in Guizhou cuisine which can be quite spicy. You should be able to easily see it from across Yuquan Rd as you walk to the subway (see the following picture).



Recommended dishes are any dry work, rice cake, and smoked pork.

<http://www.dianping.com/shop/514434>

And also a simple walk east on Shijingshan Rd is Yingfulou restaurant on the left hand side, which was decent.



<http://www.dianping.com/shop/511915>



Local but longer walk or need a cab

The Van's Dept. Store mall has lots of great food, a very short (~20RMB) cab ride from the institute. It contains many restaurants, including a great hotpot place and a karaoke bar.

HAIPENG, INSERT INFO HERE

include chinese characters to show to a taxi driver to take us to the mall
maybe a google maps screenshot



Mall url <http://www.dianping.com/shop/2906791>

Mall Restaurants

Hot Pot Place

<http://www.dianping.com/shop/2908501>

Korean BBQ

Poor service, but very good rice wine and decent food.

<http://www.dianping.com/shop/2959552>

Sichuan Place

<http://www.dianping.com/shop/2814988>

Mall Karaoke Place

<http://www.dianping.com/shop/2865535>

There is another small neighborhood nearby with lots of restaurants. In particular, some of us tried the following restaurant which was good.

Na Jia Xiao Guan

<http://www.dianping.com/shop/5963563>

Farther and reachable by Subway

There is an amazing Sichuan restaurant called Yuxin inside the lobby of a hotel at the location indicated on the map below, near the line 1 subway station Jianguomen. It's the Chang'an Grand theater with a colorful abstract face-like sculpture in the front.



Front of Building

[This is one of our favorite places in Beijing and we went here many times! signed: the March/ April crowd.] Their tea smoked duck and spicy beef strips are to die for, but really everything is delicious. Large selection of good desserts as well. It is also extremely reasonably priced.

Note: there is a very good chinese opera company in the same building and you can get tickets at the door, then have dinner, then watch a show.

<http://www.dianping.com/shop/508383>

http://theatrebeijing.com/theatres/changan_grand_theatre/

Near Dongzhimen subway/bus station (great for after the wall, but otherwise as well):

If you walk WEST of the bus station there's a district with tons of restaurants.

There's also a very good "Spicy Fish" restaurant, indicated by the westmost pin on the map below.

If you're feeling like a taste of western craft beer, there's the "great leap" brewery full of expats a few minutes walk from there, indicated by the eastmost pin on the map below.



For a change of pace, you can also try Xinjiang food (think Turkish food). The lamb kebabs, stir-fried noodles, and yogurt were great. Anything lamb is probably pretty good.





A short walk from the Baishiqiao south station (off of the green line).

<http://www.dianping.com/shop/512216>

Sweet Dynasty near worker's stadium: **INSERT INFO**

A list by Spencer Chang of 'restaurants we didn't get to try':

http://www.timeoutbeijing.com/venue/Food_Drink-Chinese-Zhejiang/9375/Kong-Yiji.html

and a few others that are somewhat close to the center.

hunan <http://www.dianping.com/shop/5269443>

<http://www.dianping.com/shop/5269443>

saokao <http://www.dianping.com/shop/13728911>

<http://www.dianping.com/shop/5328185>

hubei <http://www.dianping.com/shop/3146857>

northwest xi bei village <http://www.dianping.com/shop/2055613>

Drinking and Nightlife

Locals tend to drink at dinner and not in bars. If you would like to buy Chinese produced (grape or rice) wine, you can head east on Shijingshan Rd past Yuquan's subway and there will be a decent liquor store on the left with a green sign.

If you want to go to a bar or a club, you will have to travel a ways. Check out the following website. Wudaokou is for students, Gulou for hipsters and Sanlitun for more upscale.

<http://studyinchina.universiablogs.net/2012/12/17/nightlife-in-beijing-for-the-poor-student/>