workshop on population and speciation genomics

Český Krumlov
Summer, 2022

objectives

- settings and logistics
- introductions
- workshop history
- establishing expectations

f.a.q.

- where are the restrooms?
- coffee breaks?
  - approx. 10:00 in the lecture hall
  - anytime in House of Prelate (Computer Lab)
- where and when to eat?
  - workshop map on the main schedule page
  - information from Daniel Kintzl
  - ask the team
  - times: 12-14, 17-19
  - late night dining options are limited

The Organizing Team

Julia

Scott

Milan

Jan

Michael

Walter

Britta

Emiliano

Teaching Assistants

Angela

Andrea

Hannes

Angelica

what

history

concepts

history

Woods Hole Workshop on Molecular Evolution

Michael Cummings
Director

Scott (me!)

Michael & Scott
have dinner in DC

Mitch Sogin
Director

TA

TA

1988

2000

2001

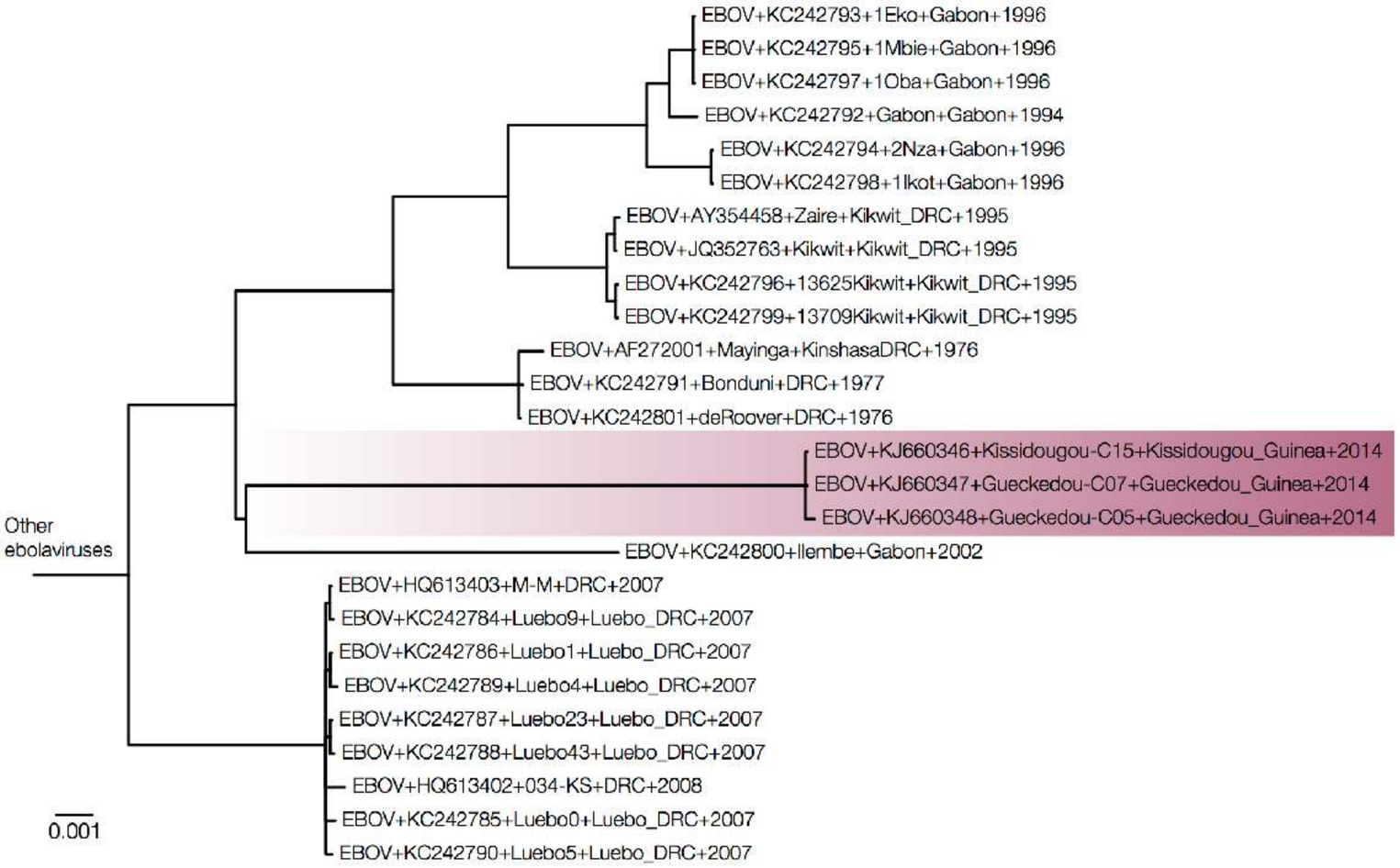
2002

2007

Walter Salzburger
Student

CDC
CENTERS FOR DISEASE
CONTROL AND PREVENTION

CDC loves trees



why Český Krumlov?

pocket-talk.org
Your Free Travel Dictionaries
ICELAND
NORWAY
SWEDEN
FINLAND
RUSSIA
ESTONIA
LATVIA
LITHUANIA
BELORUSSIA
KAZAKHSTAN
IRELAND
UNITED KINGDOM
THE NETHERLANDS
BELGIUM
GERMANY
POLAND
UKRAINE
CZECH REPUBLIC
SLOVAKIA
MOLDAVIA
FRANCE
AUSTRIA
HUNGARY
SWITZERLAND
ROMANIA
GEORGIA
AZERBAIJAN
ARMENIA
SLOVENIA
CROATIA
ITALY
BOSNIA & HER.
SERBIA
IRAN
BULGARIA
PORTUGAL
SPAIN
ALBANIA
MACE-DONIA
TURKEY
GREECE
SYRIA
IRAQ
MOROCCO
ALGERIA
TUNESIA
SAUDI ARABIA

what is a Cheskie Kroomlav?

CZECH REPUBLIC
GERMANY
POLAND
0 50 km
0 30 miles
Liberec
Ústi nad Labem
Jičín
Hradec Králové
Karlovy Vary
Labe River
Berounka River
Prague
Křivoklát
Kutá Hora
Sázava River
Silesia
Ostrava
Svitavy
Morava River
Olomouc
Plzeň
Bohemia
Vltava River
Tábor
Moravian Karst
Rožnov pod Radhoštěm
Telč
Brno
Sumava
Moravske Slovacko Region
Moravia
Dyje River
Stráznice
Hodonín
Sumava National Park
Zlatá Koruna
Český Krumlov
Mikulov
SLOVAKIA
AUSTRIA

why Český Krumlov?

- reasonably priced
- relatively close to major airports
- three I’s
  - Isolated
  - Idyllic
  - Infrastructure
- support from the local community

workshops go global

Michael & Scott
have dinner in DC

2007

2008

Workshop on
Molecular Evolution
CDC

2009

Workshop on
Molecular Evolution
Český Krumlov

2011

Workshop on
Genomics
Český Krumlov

2016

Workshop on
Population and Speciation
Genomics
Český Krumlov

2017

Workshop on
Phylogenomics
Český Krumlov

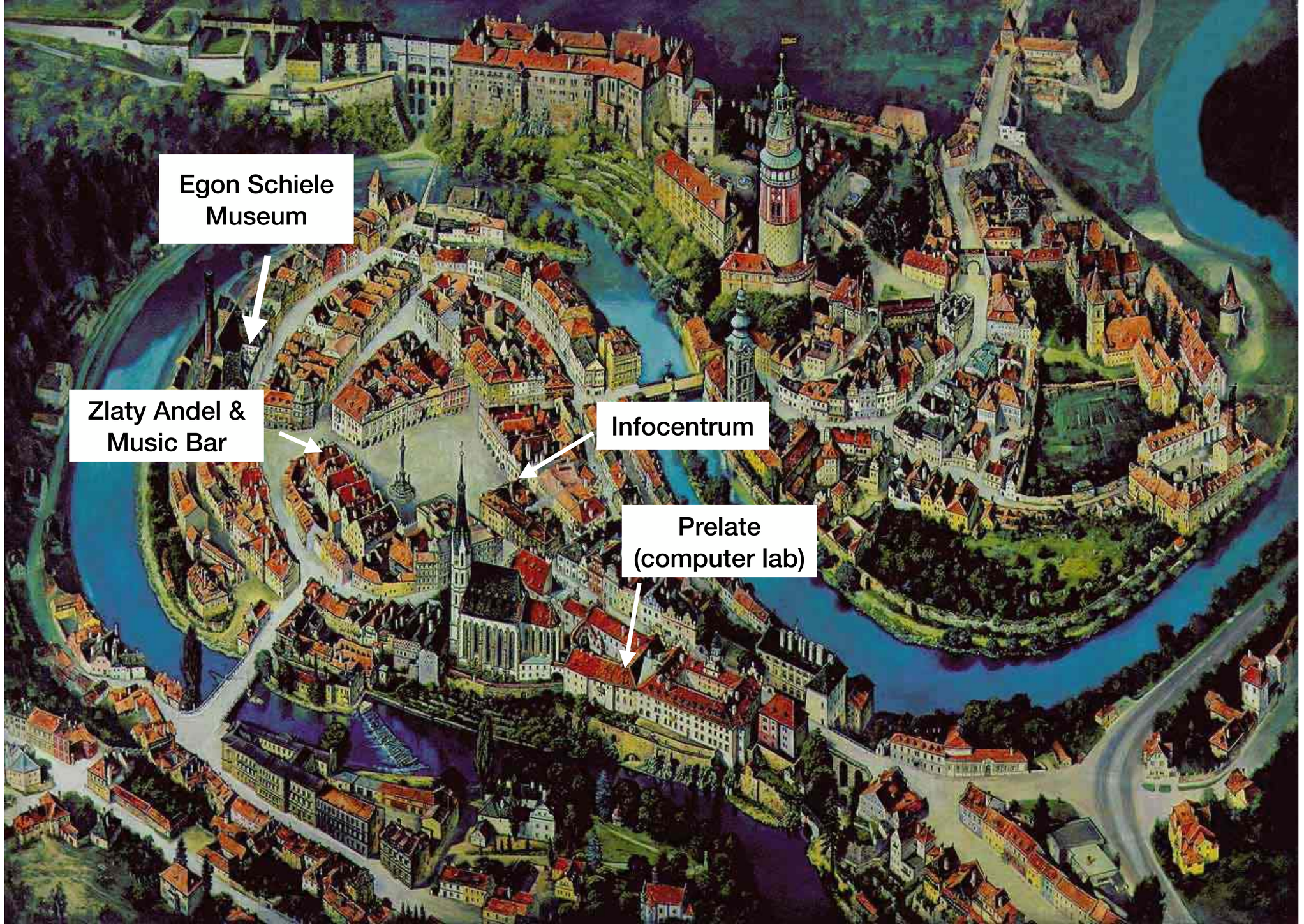
schedule in detail

http://evomics.org/2022-workshop-on-population-and-speciation-genomics-cesky-krumlov/

notable social events

- Saturday
  - meet at 6-7pm in the Town Square for a group tour of Český Krumlov
  - tour will finish with dinner (location TBD)
- Sunday
  - free day. More information from Daniel Kintzl shortly
- Friday
  - you plan end-of-workshop dinner / party

key locations


Egon Schiele Museum
Zlaty Andel & Music Bar
Infocentrum
Prelate (computer lab)

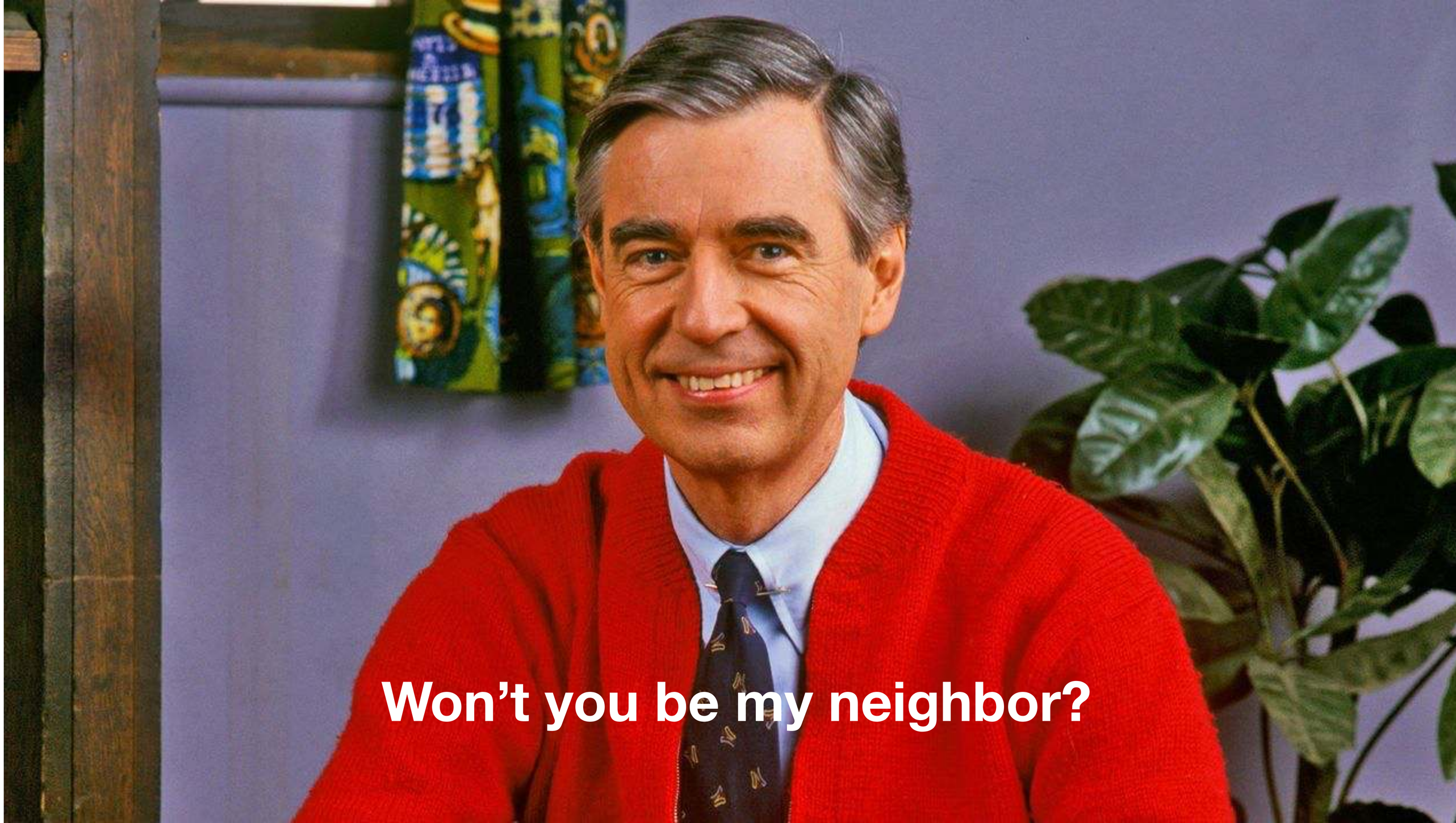
expectations

phenomena

- exhaustion
  - watch your health
    - stay hydrated (ask a staff member about the magical powers of fizzy water)
    - let a staff member know if you are not feeling well
    - **<u>If you do not feel well do not come to class!</u>**
- frustrations
  - you will likely not finish every step of every exercise
  - application bugs, connectivity issues
- you will not become an expert in 2 weeks

approach and attitude

- patience!
  - you have 2 weeks together!
- sleep
- ask questions (Slack)
- everything will be available on the web after the course is over
- have fun, make new friends and colleagues, enjoy Krumlov
- **WORK WITH YOUR NEIGHBORS**


Won’t you be my neighbor?

awk ‘{pirnt $3 “/t’ $4)’ text.txt

Thanks neighbor

code of conduct

http://evomics.org/information/code-of-conduct/

All attendees, instructors and faculty at our workshops are required to agree with the Evomics Workshops code of conduct. Organisers will enforce this code throughout the event. We expect cooperation from all participants to help ensure a safe environment for everybody. Those found to be in violation of this code of conduct will be subject to expulsion from all Workshop activities at the request of the workshop organisers.

Our Code of Conduct

Our workshops are dedicated to providing a supportive and harassment-free environment for everyone, regardless of gender, gender identity and expression, age, sexual orientation, disability, physical appearance, body size, race, ethnicity, religion (or lack thereof), or technology choices. We do not tolerate harassment of conference participants, instructors or faculty in any form.

Harassment includes offensive verbal comments, sexual images in public spaces, deliberate intimidation, stalking, following, harassing photography or recording, sustained disruption of talks or other events, inappropriate physical contact, deliberate behaviour to exclude, intimidate, or cause discomfort, and unwelcome sexual attention. This applies to any workshop venue, including talks, workshops, social events, parties, slack, Facebook, Twitter and other online media, and any other non-official events or activities taking place over the duration of the workshop.

If anyone engages in harassing behaviour, the organisers may take any action they deem appropriate, ranging from warning the offender or expulsion from the workshop without a refund. This includes the storage of personal information pertinent to the incident.

If you are being harassed, notice that someone else is being harassed, or have any other related concerns, please contact a member of the organising team immediately. A point of contact dedicated to dealing with these issues will be highlighted during the welcome talk, but please know that you can discuss issues with the Workshop directors.

computer lab

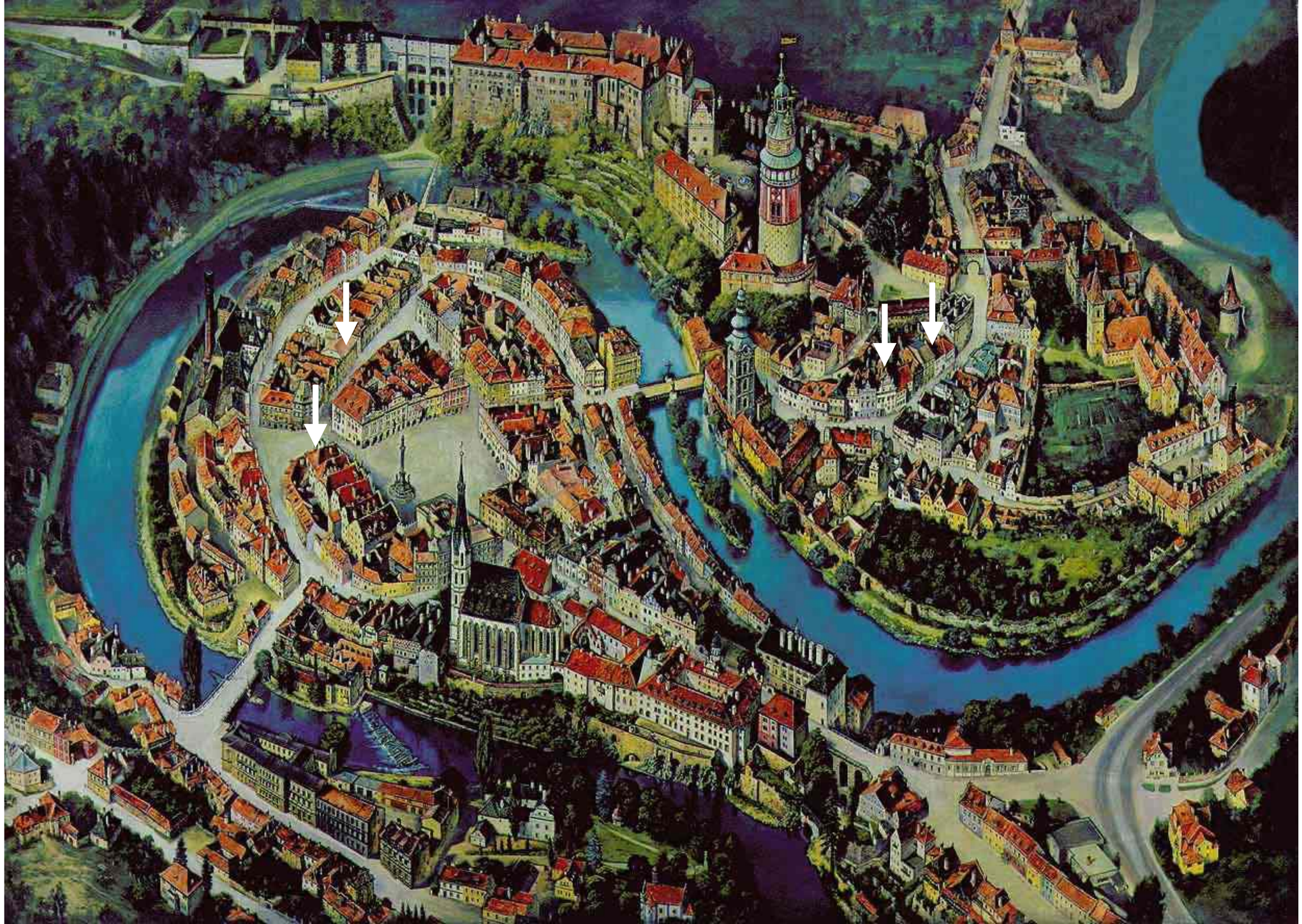
- dates back to the 2nd half of the 14th century
- one of the oldest buildings in Krumlov (Gothic period)
- has housed several breweries between the 1596 - 1865
- important for us:
  - fully wired and wireless internet
  - power distribution

lab policy

- no food or drink inside the computer hall
- wipe feet before entering
- coats in the coatroom
- do not touch the walls (frescoes) - painter died in 1791
- strict arrival and departure times
- wash your own coffee mugs

post lab discussions

- important feature of the Workshop
- Music bar (tonight), Zappa Bar, Apotheka



next

- information from Daniel Kintzl

Český Krumlov & Science …it was Wilhem von Rosenberg who became the most important Maecenas of the hermetic sciences, specially of alchemy…

…Temporal display of workshop, where precious metals were processed and their quality tested…

…Present science in Cesky Krumlov? ;-)

Workshop 2022

WELCOME!

Where can I eat – partner restaurants, pubs?

Where can I buy a food – bakery, fruit…?

I don´t feel well – Pharmacy, Hospital?

Other services – Taxi, exchange?

What to do – facultative programms?

Where can I eat – restaurants, pubs...?

Together with our partners we prepared special - cheaper boarding possibilities.
Please respect the payment condition of each of these restaurants - we recommend payment cash in CZK.
You can enjoy also your meal in approximately 30 others restaurants, coffees and pubs in the town.
PARTNER RESTAURANTS – for getting discount or special price <u>show your workshop name tag</u> to the staff
This offer is valid only from 22nd May till 17th June 2022 TIP: ca. 10% if you are satisfied, 15% if you are pleased with the service (my rules DK) ...

Restaurant – PUB DEPO
Lunch menu 139,- CZK or 10% Discount
Dinner 10% discount
Art: Czech and international cuisine

Restaurant Laibon
Lunch menu 130,- CZK or discount 10%
Dinner 15% discount a la carte
Art: vegetarian cuisine

Restaurant Švejk
10 % Discount
Art: Czech and international cusien

EGON Café
10 % Discount
Art: Nespresso, sendwiges, cakes,
Limite opening time – ask th staff

Restaurant Don Julis (Hotel Zlaty Andel)
10 % Discount
Art: Czech and international cusien

Restaurant Maštal
10 % Discount
Art: Czech and international cusien

Restaurant Šatlava
5 % Discount
Art: Grill restaurant

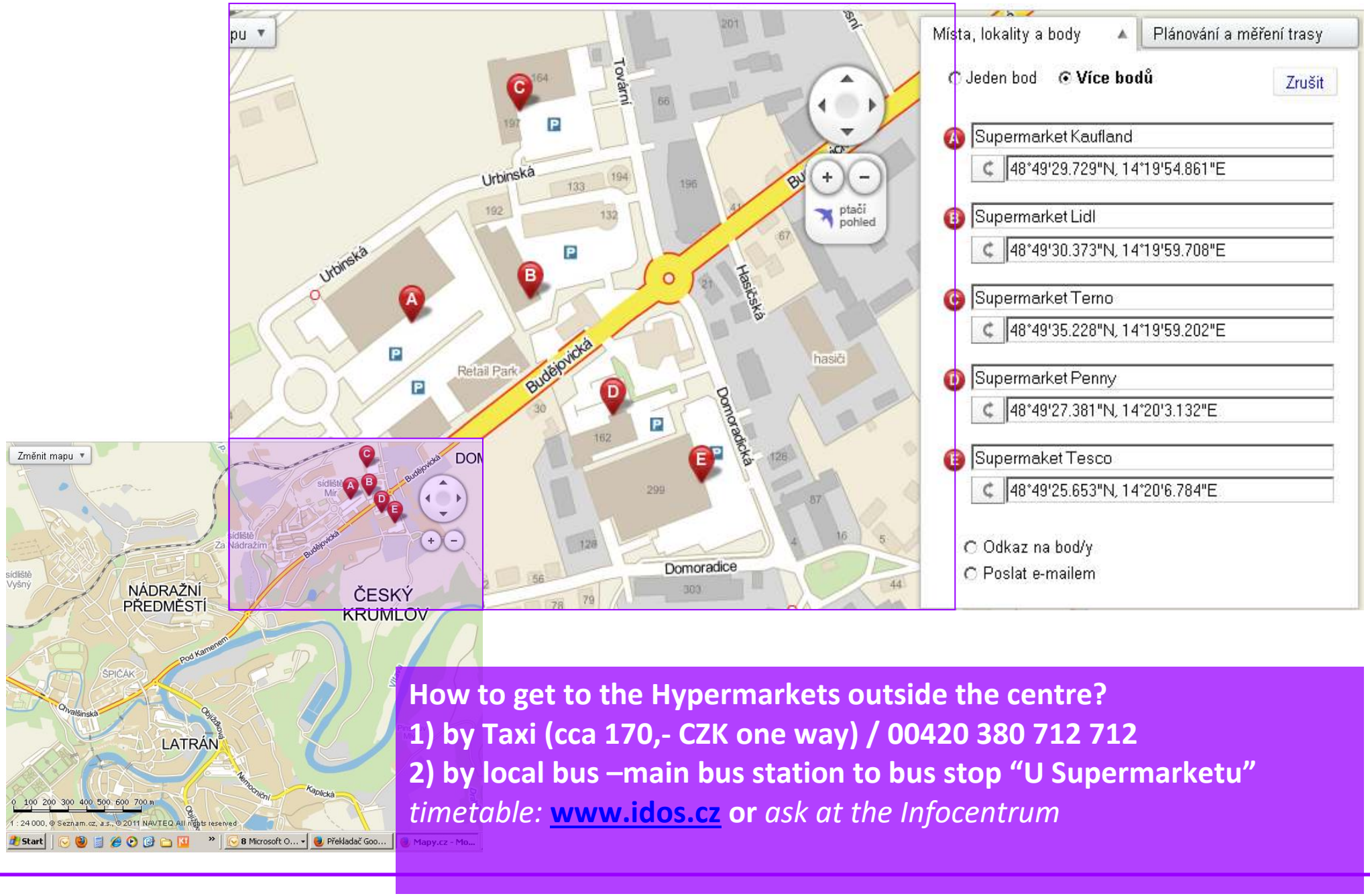
Restaurant Mill (Krumlvoský Mlýn)
5 % Discount
Art: Czech and international cusien

Fast-food and Café:
Theater Club Antré - Horní Street (the Town Theater), **Café & Wine Bar Kolektiv** – Latran Str.,
Kabab House – Linecká Str.,

Other recommended restaurants in the town centre:
Hospoda na Louži – Czech cuisine, with the local beer Eggenberg (PUB)
More restaurants, pubs, bars under: http://www.ckrumlov.info/gastronomy

Where I can buy some food – markets & drugstores in the town centre:

Bigger supermarkets are out of the town center:



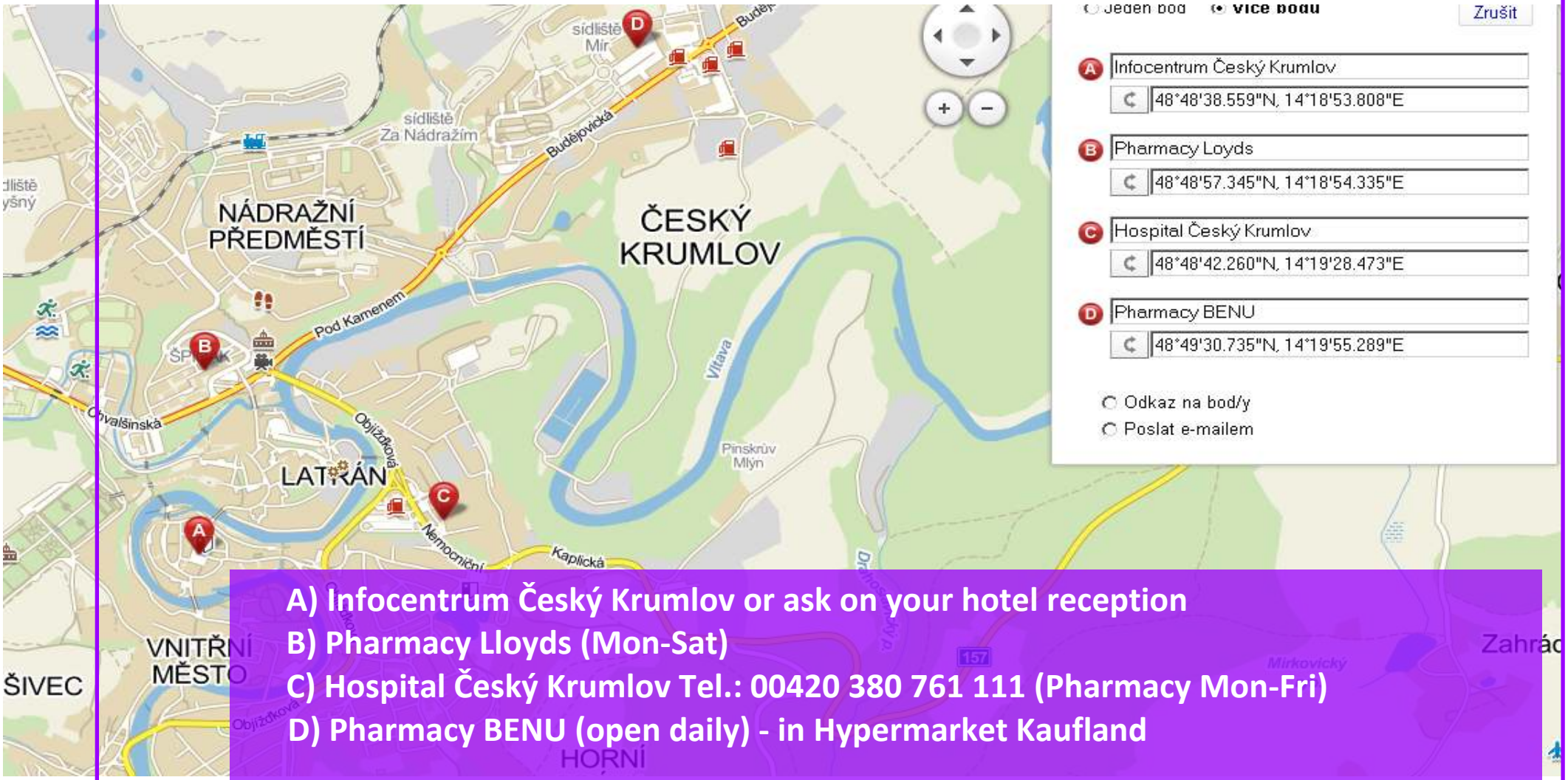
How to get to the Hypermarkets outside the centre?

1) by Taxi (cca 170,- CZK one way) / 00420 380 712 712

2) by local bus –main bus station to bus stop “U Supermarketu”

timetable: **www.idos.cz** **or** *ask at the Infocentrum*

I don´t feel well – Pharmacy, Hospital…:



A) Infocentrum Český Krumlov or ask on your hotel reception
B) Pharmacy Lloyds (Mon-Sat)
C) Hospital Český Krumlov Tel.: 00420 380 761 111 (Pharmacy Mon-Fri)
D) Pharmacy BENU (open daily) - in Hypermarket Kaufland

Emergency Telephone numbers:
112 Emergency / 150 Fire brigade / 155 First aid / 156 Town police / 158 State police

Exchange:
At Infocentrum or in the Bank or use the ATM
(we don´t recommend the Exchange “Check Point”!)

TAXI Krumlov
Call: 00420 380 712 712
or ask at the Infocentrum or on your hotel reception

LAUNDERING - Please ask in you gust house or use the discounted service et the Hotel Zlaty Andel

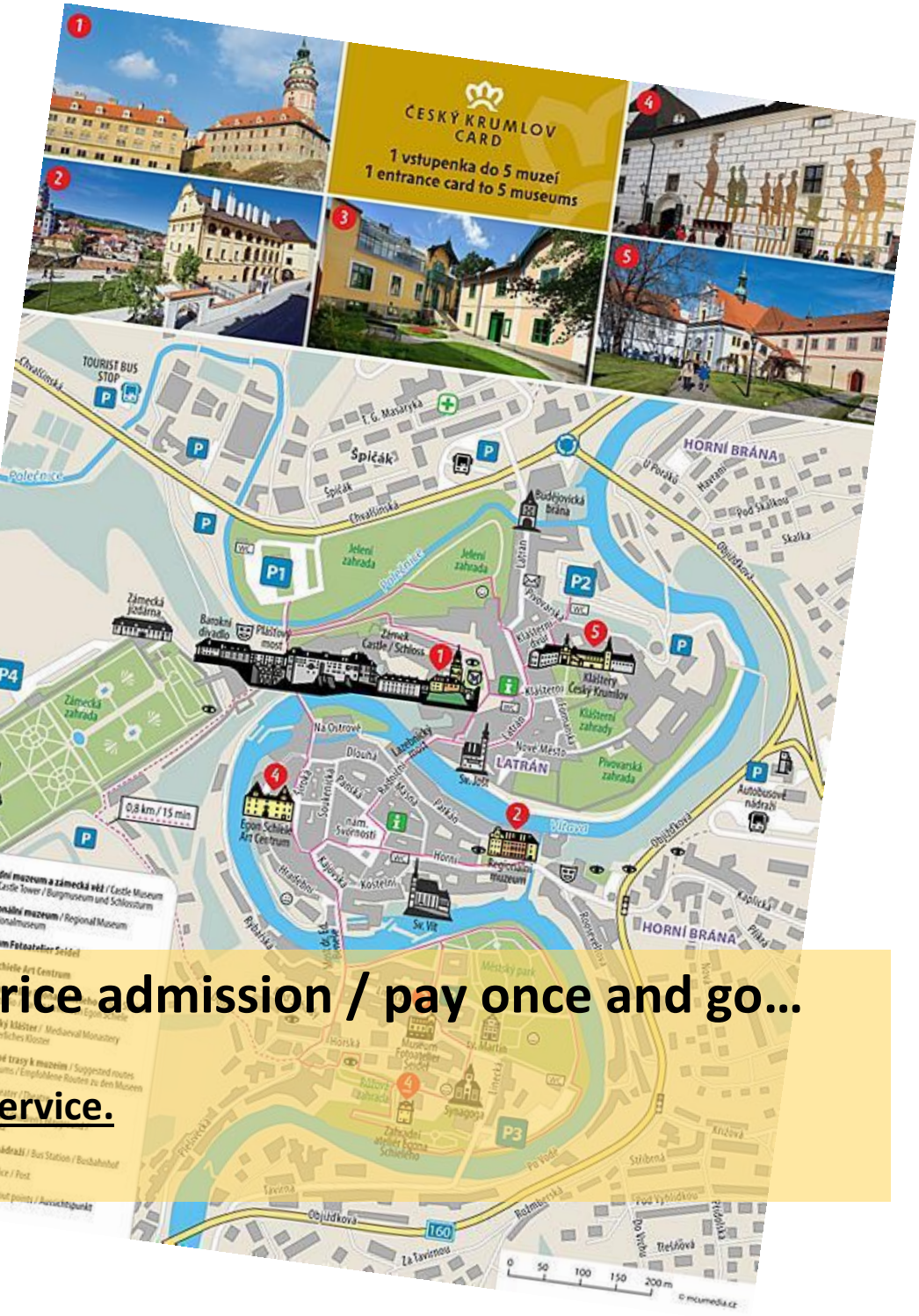
What to do – special facultative offer

TOWN TOUR + WORKSHOP DINNER

DATE: Saturday 11th May at 6 p.m., Place….???

WHERE: Meeting point on the main square near the St. Mary column

no tickets - just be there



combi-ticket into 5 museums / half-price admission / pay once and go…

Price: 400,- CZK per person (200,- CZK)

TICKETS: available only at Infocentrum – Tickets service.

Baroque Theatre of ČESKÝ KRUMLOV CASTLE (V. castel courtyard) with English speaking guide

Price: 300,- CZK per person

DATE:

Sunday 11th May at 02 p.m. (20 places), Meeting: Infocentrum 01:00 p.m.

THIS TICKETS are available only at Infocentrum – Tickets service.

2HOUR of YOGA

June 9th (beginning at 12:15 p.m.) + June 16th (beginning 12:15 p.m.) January

Price for two lessons: 290,- CZK (2 x 1 hour Yoga / max. 15 persons)

WHERE: In the Lector venue in Egon Schiele Art Centre (on a sunny day in the park)

Tickets available at Infocentrum on the square

EASY HIKING & RAFTING ca. 5 hours long trip

Where: from Český Krumlov to Zlatá Koruna (Golden Crown) Date: Sunday the 12th June
Price: 400,- CZK per Person (place in boat, lifejacket, paddle…)
Beginning: Sunday the 29th May at 1.00 p.m. , meeting in Infocentrum
Capacity: min. 10 persons max. 36 (6 rafts)
tickets available at Infocentrum till Saturday the 28th May till 5 p.m.

Czech and regional MORAVIAN WINE WITH COMMENTARY and taste of local specialties and delicacies…

Price 950,- CZK per. person

Where: Wine shop St. Christopher (Fairytale House), Radniční Str. 29,

Beginning: Sunday the 12th June at 7 p.m.

Capacity: min. 10 per. max. 34 per. for the tasting

tickets available at Infocentrum till Saturday the 11th May till 5 p.m.

PICTURE FROM THE HISTORICAL PHOTOSTUDIO SEIDEL

Date: every day except Monday from 9 a.m. till 2 p.m. (lunches time 12 – 01 p.m.)

Payment directly in the Museum

Climb on – Via Ferrata

Just a few minutes' walk from the centre of Český Krumlov, on the right bank of the Vltava River on the rock formation knows as Havraní skála (The Raven Rock), is the first Via ferrata. The first route with difficulty C is currently open for more experienced ferratists. If you are new to ferrata climbing, you can book an instructor who will go through the route with you and teach you the skills for safe climbing.

Ferrata Havranka

The first route of the ferrata, with difficulty level C, is currently accessible. In 2022, two more routes of difficulty levels C and C/D are planned, as well as a children's route of difficulty level B.

Swimming pool in Cesky Krumlov - Opening hours for public

6 – 8 a.m. except Monday
12 – 2 p.m. except Monday

General rules for facultative trips and activities 2022

1) If you need cancel your ticket, please bring it personally to the Infocentrum before the dead line of each activity. The cancellation after the trip cannot be accepted.

2) If you have any questions or if you were discontented with some service, please contact Mr. Daniel Kintzl from Infocentrum or inform the staff at the Infocentrum – front office

3) All offered programs and times are subject to changed mostly regarding the weather or personal capacity.

4) For the offers aren´t provided discounts (ISIC Card, ITYC Card …)

For other leisure activities – Horseback riding, guided town tours, swimming, ice skating… ask the staff of Infocentrum on the main square:

Infocentrum Český Krumlov:
Náměstí Svornosti 2 / 38101 Český Krumlov /
Telephone: +420 380 704 622, E-mail: info@ckrumlov.info,
www.ckrumlov.info/infocentre

PRACTICAL CONVERSATION...

Good morning >> Dobré ráno

How are you? >> Jak se máš?

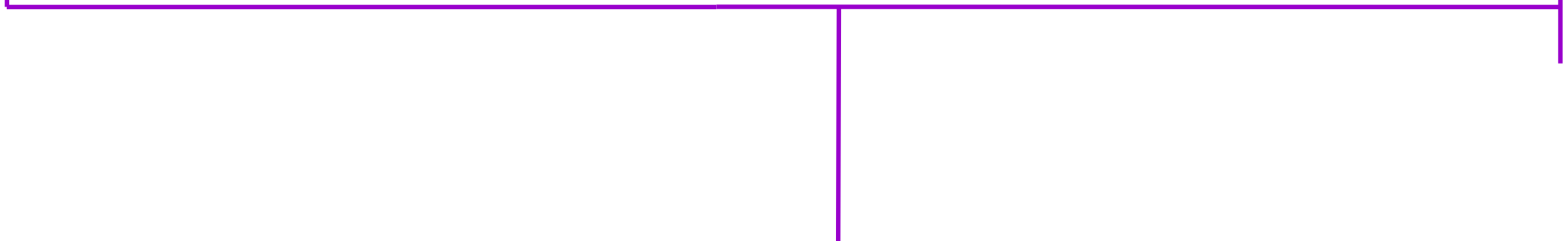
I'm thirsty to drink my own eye >> mám žízen,
že bych si vypil vlastní oko

Can I invite you for a drink? >> Mohu tě pozvat na drink?

Thank you, its kind >> Děkuji, to je milé

fizzy water and one beer please >> perlivou vodu a pivo

Cheers! >> Na zdraví



enjoy the workshop

Workshop on Population and Speciation Genomics
Český Krumlov
WPSG
2020

Pieter Claw

Matteo Fumagalli

Matthew Hahn

Flora Jay

Chris Jiggins

Thorfinn Korneliussen

Fabrizio Mafessoni

Michael Matschiner

Leonie Moyle

Simon Myers

Rasmus Nielsen

Valentina Peona

Jasmin Rees

Walter Salzburger

Derek Setter

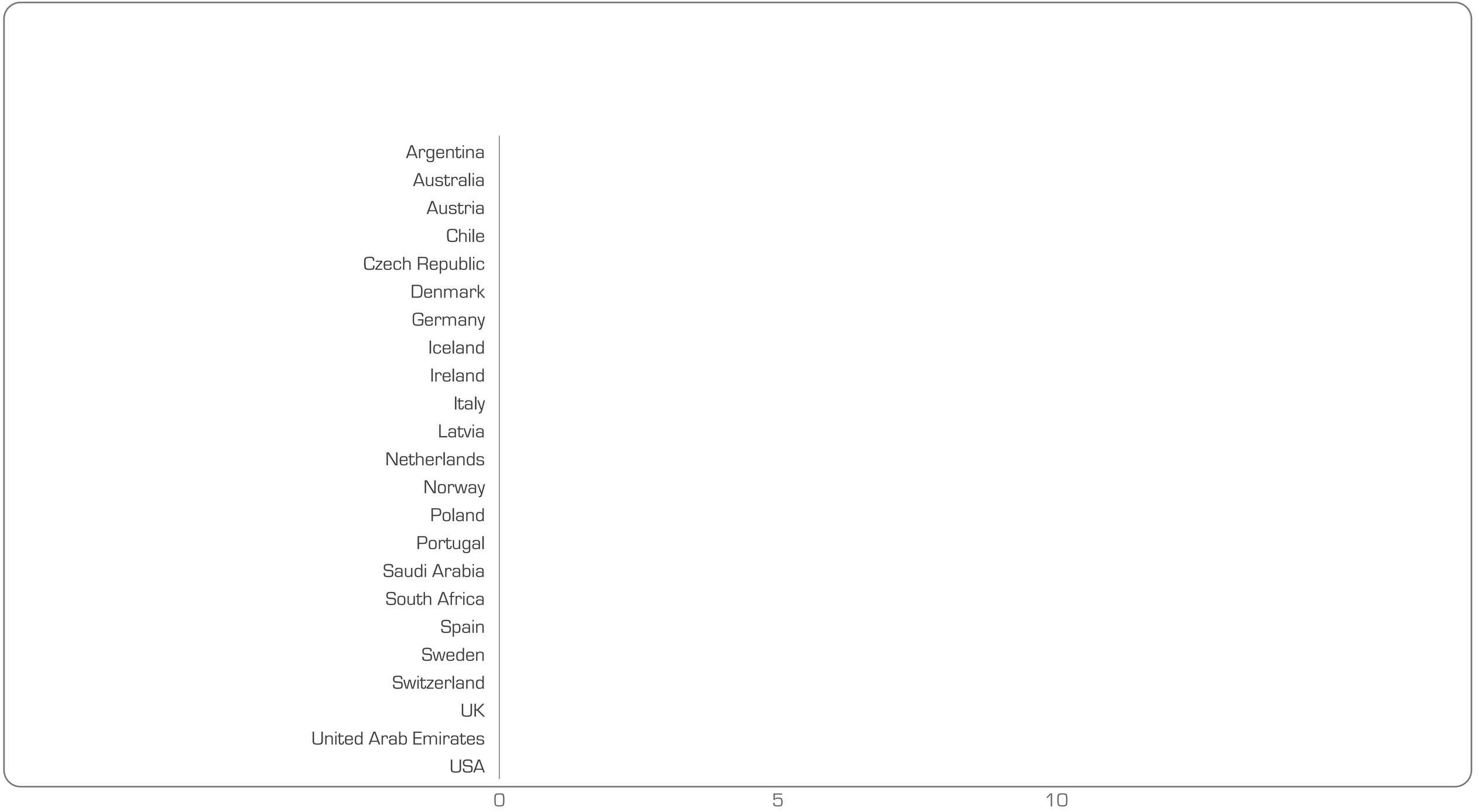
Vitor Sousa

Alexander Suh

Georgia Tsambos

Date	Sun	Mon	Tue	Wed	Thur	Fri	Sat	Sun	Mon	Tue	Wed	Thur	Fri	Sat
Name	05.06.	06.06.	07.06.	08.06.	09.06.	10.06.	11.06.	12.06.	13.06.	14.06.	15.06.	16.06.	17.06.	18.06.
Walter Salzburger							T	.	L					
Michael Matschiner		T	L		A			.						
Valentina Peona								.	A	L				
Georgia Tsambos								.				T/A	L	
Alexander Suh						L		.	T					
Derek Setter						A	L	.						
Vitor Sousa				L	T/A			.						
Rasmus Nielsen		L	T/A					.						
Thorfinn Korneliussen		L	A					.						
Matthew Hahn				T/A	L			.						
Leonie Moyle					L	T		.						
Pieter Clauw						A	L	.						
Jasmin Rees								.			A	L		
Chris Jiggins								.	T / L					
Matteo Fumagalli								.		T/A	L			
Flora Jay								.		T/A	L			
Simon Myers								.			T/A	L		
Fabrizio Mafessoni								.					T / L	
Leo Speidel								.			Online			

Present full day
Arrival/departure day
L = faculty lunch
T = lecture / talk
A = exercies / activity
. = free day


Argentina
Australia
Austria
Chile
Czech Republic
Denmark
Germany
Iceland
Ireland
Italy
Latvia
Netherlands
Norway
Poland
Portugal
Saudi Arabia
South Africa
Spain
Sweden
Switzerland
UK
United Arab Emirates
USA
0
5
10

6 Jun	Monday	10:30–12:00	Michael Matschiner	**Likelihood and probability**	Egon Schiele
		14:00–17:00	Workshop Team	**AMI introduction/Probability activity**	Prelate
		19:00–22:00	Everyone	**Participant introduction**	Prelate
7 Jun	Tuesday	9:00–12:00	Rasmus Nielsen	**Population genomics**	Egon Schiele
		14:00–17:00	Rasmus Nielsen and Thorfinn Korneliussen	**ANGSD activity**	Prelate
		19:00–22:00	Rasmus Nielsen and Thorfinn Korneliussen	**ANGSD activity (continued)**	Prelate
8 Jun	Wednesday	9:00–12:00	Matthew Hahn	**Coalescent theory and introgression**	Egon Schiele
		14:00–17:00	Matthew Hahn and Workshop Team	**D-statistics activity**	Prelate
		19:00–22:00	Matthew Hahn and Workshop Team	**D-statistics activity (continued)**	Prelate
9 Jun	Thursday	9:00–12:00	Vitor Sousa	**Model-based inference of population history**	Egon Schiele
		14:00–17:00	Workshop Team	**Species tree inference activity**	Prelate
		19:00–22:00	Vitor Sousa	**fastsimcoal2 activity**	Prelate
10 Jun	Friday	9:00–12:00	Leonie Moyle	**Selection and adaptation**	Egon Schiele
		14:00–17:00	Derek Setter	**Sweep detection**	Prelate
		19:00–22:00	Pieter Clauw	**GWAS**	Prelate
11 Jun	Saturday	9:00–12:00	Walter Salzburger	**The genomics of organismal diversification**	Egon Schiele
		14:00–17:00	Workshop Team	**Open lab**	Prelate
		18:00—	Everyone	**Town Tour (18:00) and Dinner (19:00–)**	Meet in Town Square

13 Jun Monday	9:00–12:00	Chris Jiggins	**Speciation with gene flow**	Egon Schiele
	14:00–17:00	Alexander Suh	**Structural variation**	Egon Schiele
	19:00–22:00	Valentina Peona	**Structural variation activity**	Prelate
14 Jun Tuesday	9:00–12:00	Matteo Fumagalli and Flora Jay	**Machine learning**	Egon Schiele
	14:00–17:00	Flora Jay	**Demography inference with ML activity**	Prelate
	19:00–22:00	Matteo Fumagalli	**Selection inference with ML activity**	Prelate
15 Jun Wednesday	9:00–12:00	Simon Myers	**Tree sequences**	Egon Schiele
	14:00–17:00	Simon Myers, Jasmin Rees, and Leo Speidel	**Relate activity**	Prelate
	19:00–22:00	Workshop Team	**Open lab**	Prelate
16 Jun Thursday	9:00–12:00	Georgia Tsambos	**Simulation**	Egon Schiele
	14:00–17:00	Georgia Tsambos	**Simulation with msprime activity**	Prelate
	19:00–22:00	Georgia Tsambos	**Inference with tsinfer activity**	Prelate
17 Jun Friday	9:00–12:00	Fabrizio Mafessoni	**Ancient genomics**	Egon Schiele
	14:00–17:00	Workshop Team	**Wrap-up**	Prelate
	19:00–22:00	Everyone	**End of Workshop Party**	
18 Jun Saturday	9:00–12:00	Everyone	**Departure**	Egon Schiele

9:00/9am=9:00:00

http://evomics.org/2022-workshop-on-popu...

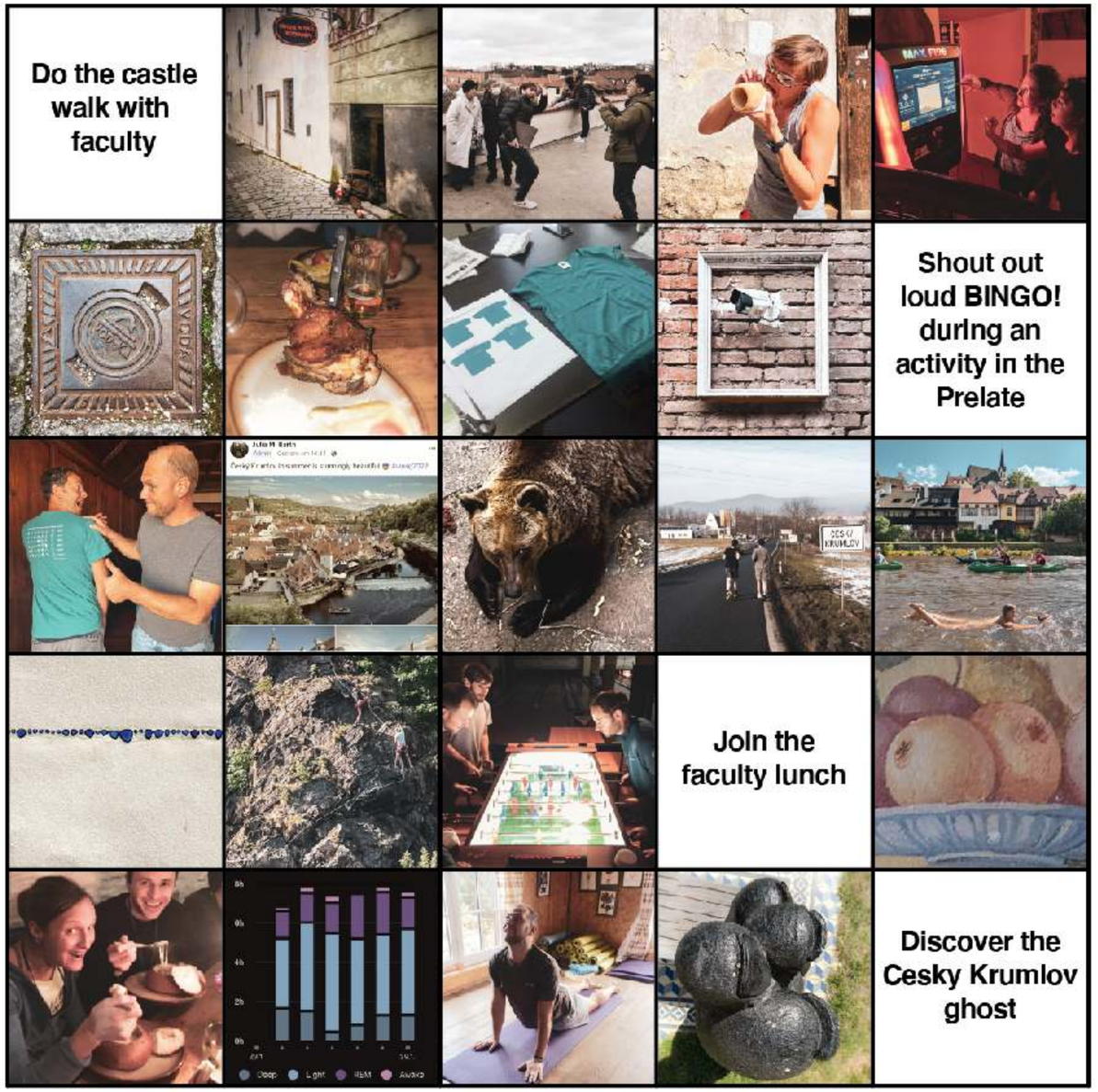
https://wpsg2022_participants.slack.com

Workshop on Population and Speciation Genomics

#wpsg2022

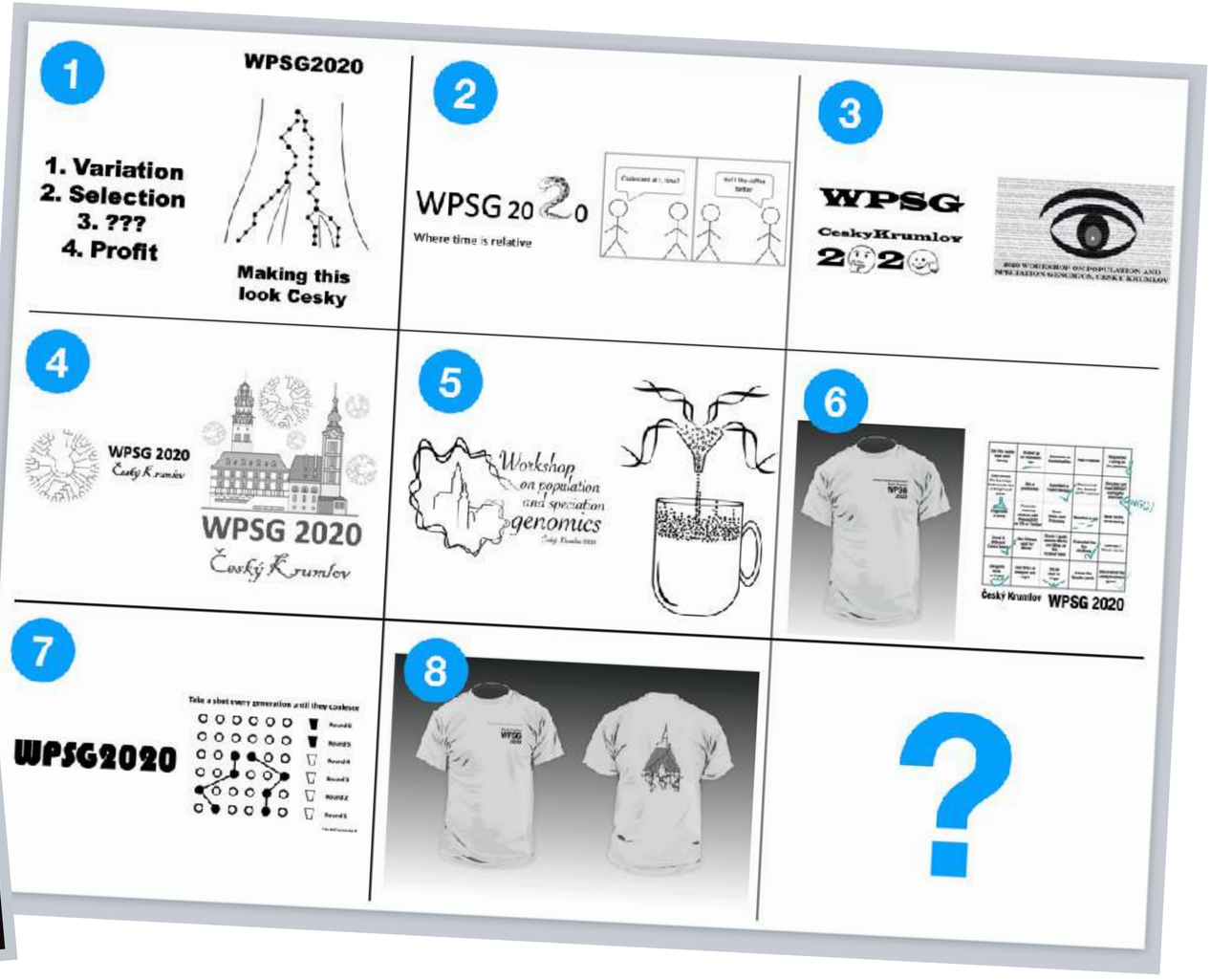
Summer edition!

- Explore Český Krumlov and take pictures
- A row, column or diagonal of five is a Bingo!
- Win the WPSG2022 Bingo! prize



Submission deadline:

Friday, June 10



The history and organization of the Workshop on Population and Speciation Genomics

Julia MI Barth[1], Scott Handley[2], Daniel Kintzl[3], Guy Leonard[4], Milan Malinsky[5], Michael Matschiner[6]*, Britta S Meyer[7], Walter Salzburger[1], Jan Stefka[8], Emiliano Trucchi[9]

All authors contributed equally and are sorted alphabetically

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[7]Max Planck Institute for Evolutionary Biology, August-Thienemann-Str. 2, 24306 Plön, Germany.

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Abstract

With the advent of high-throughput genome sequencing, bioinformatics training has become essential for research in evolutionary biology and related fields. However, individual research groups are often not in the position to teach students about the most up-to-date methodology in the field. To fill this gap, extended bioinformatics courses have been developed by various institutions and provide intense training over the course of two or more weeks. Here, we describe our experience with the organization of a course in one of the longest-running extended bioinformatics series of workshops, the Evomics Workshop on Population and Speciation Genomics that takes place biennially in the UNESCO world heritage town of Český Krumlov, Czech Republic. We list the key ingredients that make this workshop successful in our view, and describe the routine for workshop organization that we have optimized over the years. We report the results of a survey conducted among past workshop participants that quantifies measures of effective teaching and provide examples of how the workshop setting has led to the cross-fertilisation of ideas and ultimately scientific progress.

Dear participants

The Workshop on Population and Speciation Genomics is fast approaching. While the availability of vaccines and other factors led to an easing of Covid restrictions in most countries, the disease is still circulating and many of you might have been wondering about our approach to Covid-related risks. Overall, we hope the workshop is going to be an immersive experience, with many scientific and also social interactions among participants, faculty, and organisers. We believe that these interactions stimulate learning, collaborations, new inspiration, and ultimately scientific progress.

To be able to enjoy the benefits of the workshop, please read and take seriously the following guidelines. Covid mitigation/guidelines:

1) All participants are fully vaccinated. This has been checked during registration.
2) We strongly encourage everyone to take a Covid test on the day before departure. If you test positive, please do not come to Cesky Krumlov! Inform us and your course fee will be fully refunded. We are not going to enforce this as a rule, but please do take the pre-departure test, especially if you don't feel a 100%. If you arrive to Cesky Krumlov with Covid and spread it around you may ruin the entire workshop for many others.
3) We strongly encourage wearing masks during the group indoor learning activities (e.g., in the House of Prelate). This is especially important at the beginning.
4) We will attempt to mitigate the risks in the organisation: e.g., we will endeavour to organise social program outdoors rather than indoors where possible.
5) Masks and tests will be available from the organisers.
6) We will especially encourage (but not enforce) at least one test shortly after arrival (e.g., 3 or 4 days after travel) … please do this for the benefit of the entire workshop.

We also note that the laws of the Czech Republic require anyone diagnosed with Covid to isolate a minimum of 7 days. In the unfortunate case that someone tests positive, we will of course follow the law. We would also help isolated cases with food deliveries etc. and intend to assist isolating participants with some online activities as far as possible if their health allows.

We hope that everyone remains healthy and that we will all enjoy an exciting and stimulating two weeks in Cesky Krumlov. The workshop begins this Sunday, 5th July, at 19:00 with a welcome dinner and reception at Hotel Zlaty Andel on the main square (likely outdoors in front of the hotel). For those who have signed up for UNIX primer, the start is even earlier, at 16:00 in the computer laboratories of the House of Prelate (details will be communicated separately).

Best wishes
The Workshop Team