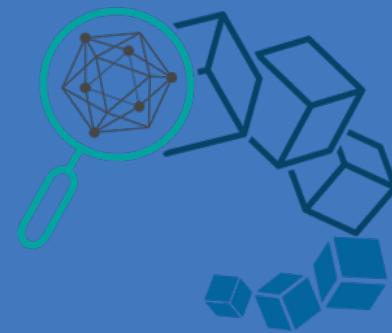




**HYPERLEDGER**  
BLOCKCHAIN TECHNOLOGIES FOR BUSINESS

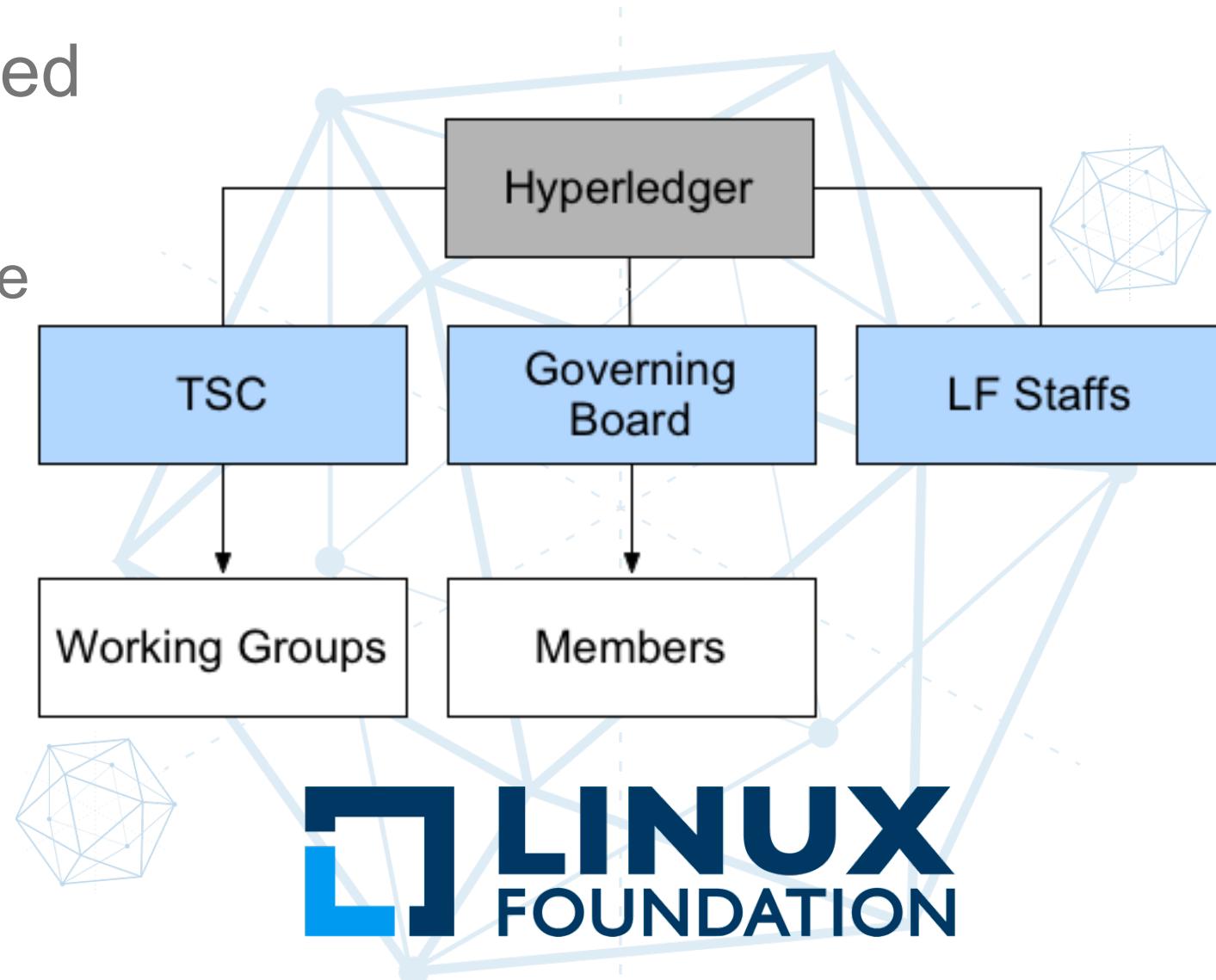


# Hyperledger Community&Project Update

Baohua Yang  
Dec, 2017

# Hyperledger Community

- Linux Foundation Supported Organizations
  - Technical Steering Committee
  - Governing Board
  - Linux Foundation Staffs
- TWG-China
  - 40+ Member Companies



# Community Working Groups

**Working Groups are open to the public**

**Technical  
Working Group, China  
(TWG - China)**

**Requirements  
Working Group**

**Identity  
Working Group**

**Training and  
Education  
Working  
Group**

**Architecture  
Working Group**

**Whitepaper  
Working Group**

**Blockchain Protocol  
Working Group**

# The Hyperledger Effect

THE WALL STREET JOURNAL.

How Blockchain  
Will Save Your Life

**80 PoCs**

In 1H 2017  
across supply chain, real  
estate, music, trading



CoinDesk

Hyperledger's Next Act:  
A Blockchain Bridge to China

MIT Technology Review

Web Pioneer Tries to Incubate  
a Second Digital Revolution

**3.6M**

Lines of code

**9**

Code Bases

**180+**

Members (40+ in China)

THE NEW STACK

Blockchain Hyperledger  
Project Generates Interest  
in the Enterprise

**600+**

Average month-over-month  
Global Press Articles Covering  
Hyperledger in 2016



**HYPERLEDGER**

BLOCKCHAIN TECHNOLOGIES FOR BUSINESS

# Community and Ecosystem Engagement

Behlendorf is a regular keynoter and Hyperledger exhibits at cross-industry events.

Hyperledger Member Summit.

Active engagement with technology and finance journalists and analysts to continue educating the market on Hyperledger.

[hyperledger.org/news](https://hyperledger.org/news)

Technical Steering Committee hosts regular online and face-to-face hackathons. Join our mailing lists to learn about these and other technical activities. [hyperledger.org/community](https://hyperledger.org/community)



# Hyperledger Global Meetups



## Hyperledger Meetups

We are **20,400+ members** across **71 Meetups**

# Online Course



Courses ▾ Programs ▾ Schools & Partners About ▾

Search:



Sign In Register

Home > All Subjects > Business & Management > Blockchain for Business - An Introduction to Hyperledger Technologies



## Blockchain for Business - An Introduction to Hyperledger Technologies

A primer to blockchain and distributed ledger technologies. Learn how to start building blockchain applications with Hyperledger frameworks.



Self-Paced

**Enroll Now**

- I would like to receive email from The Linux Foundation and learn about other offerings related to Blockchain for Business - An Introduction to Hyperledger Technologies.

### About this course



Discover the power of business blockchains and distributed ledger technologies with an overview of Hyperledger and introductions to its key frameworks. All over the global market there are ledgers that organizations and individuals alike must trust. Blockchain technologies record promises, trades,

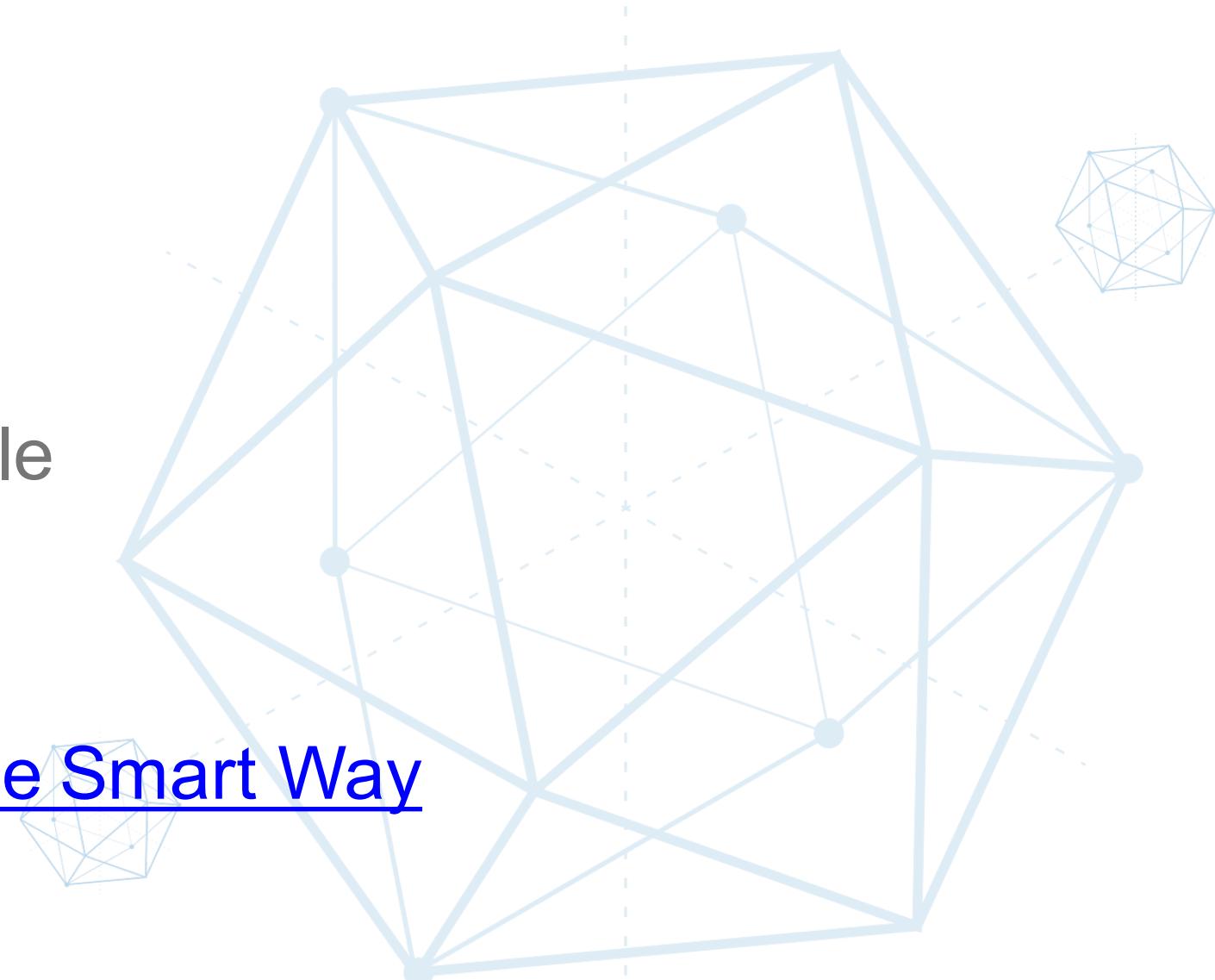
Length: 8 weeks

Effort: 3 to 4 hours per week

Price: FREE  
Add a Verified Certificate for

# Open-source Community Culture

- Open is the 1st principle
  - Open mind
  - Open discussions
  - Open standpoints
- Be modest and responsible
- Self-motivation, just fix it!
- How To Ask Questions The Smart Way



# How To Ask Questions The Smart Way

在你准备要通过电子邮件、新闻群组或者聊天室提出技术问题前，请先做到以下事情

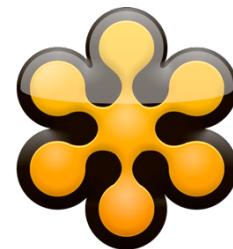
1. 尝试在你准备提问的论坛的旧文章中搜索答案。
2. 尝试上网搜索以找到答案。
3. 尝试阅读手册以找到答案。
4. 尝试阅读常见问题文件 (FAQ) 以找到答案。
5. 尝试自己检查或试验以找到答案
6. 向你身边的强者朋友打听到以找到答案。
7. 如果你是程序开发者，请尝试阅读源代码以找到答案

- 使用有意义且描述明确的标题
- 使问题容易回复
- 用清晰、正确、精准并合法语法的语句
- 使用易于读取且标准的文件格式发送问题
- 精确的描述问题并言之有物
- 话不在多而在精
- 别动辄声称找到Bug
- 可以低声下气，但还是要先做功课
- 描述问题症状而非猜测
- 按发生时间先后列出问题症状
- 描述目标而不是过程
- 别要求使用私人电邮回复
- 清楚明确的表达你的问题以及需求
- 询问有关代码的问题时
- 别把自己家庭作业的问题贴上来
- 去掉无意义的提问句
- 即使你很急也不要再在标题写紧急
- 礼多人不怪，而且有时还很有帮助
- 问题解决后，加个简短的补充说明

# Open Communications

- Open Communications

- [Mail-list](#)
- [Rocket chat](#)
- [Meetings](#)
- [Wiki](#)
- [Github](#)



# Technical Working Group China

- Founded at Dec, 2016
  - Supported by Hyperledger TSC, Governing Board, and LF
- Responsibilities
  - Help build technical community in Greater China area
  - Promote the Hyperledger technical development and adoptions
  - Bridge and develop the Open-source culture



# Existing Working Areas



Innovation



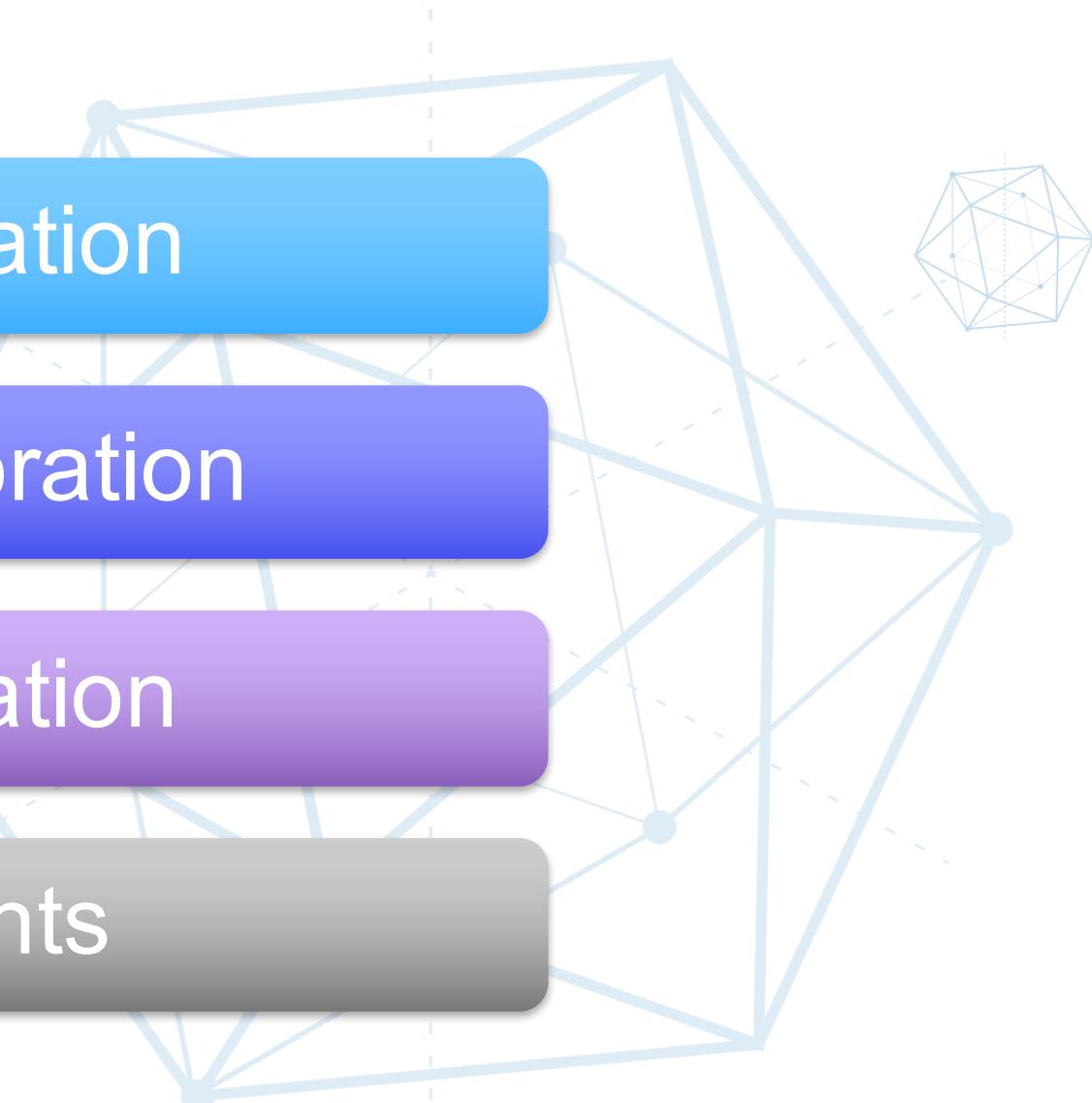
Collaboration



Education



Events

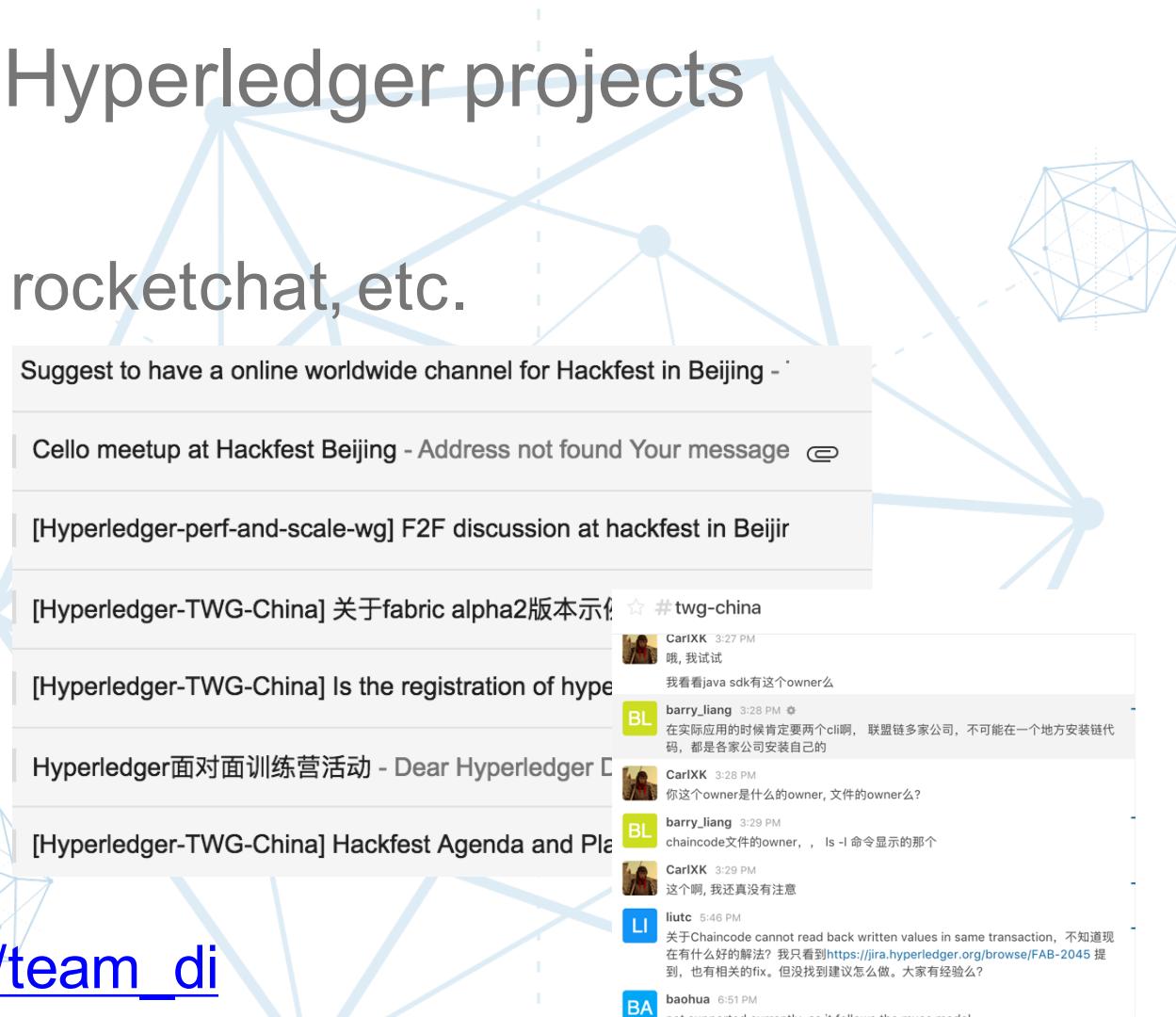


# Development and Innovation

- Help lead the development of Hyperledger projects
  - Code, tutorial, demos
  - Technical Discussions on maillist, rocketchat, etc.

Name	LF ID	Organization	Email	Location
Yaoguo Jiang		Huawei	jiangyaoguo@huawei.com	Shenzhen
Ray Chen		Independent	oldsharp@gmail.com	Hangzhou
Wei Hu		HyperChain	wei@hyperchain.cn	Hangzhou
Zhengping Xu		ChainNova	zerppen@chainnova.com	Beijing
Zhangjiong Xuan		Hyperchain	xuanzhangjiong@hyperchain.cn	Hangzhou
Bei Wang	beiwang	Yunphant	wangbei@yunphant.com	Hangzhou

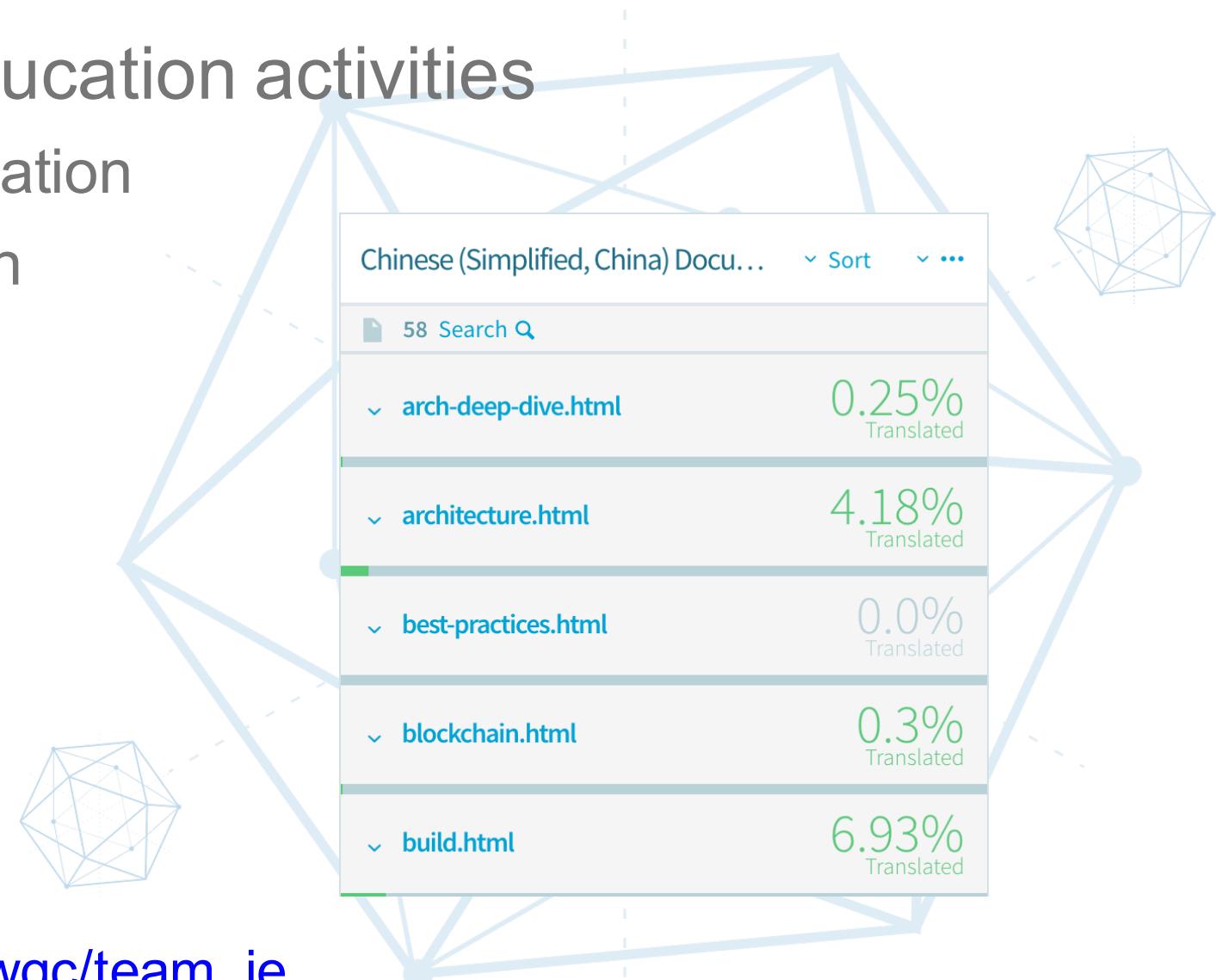
[https://wiki.hyperledger.org/groups/twgc/team\\_di](https://wiki.hyperledger.org/groups/twgc/team_di)



# i18n and Education

- Help lead the i18n and education activities
  - Documentation writing/translation
  - Seminar/training organization

Name	Organization	Email	Location	Zanata ID	Role
Linsheng Yu	ChainNova	yis@chainnova.com	Beijing	linsheng	Maintainer
Jiannan Guo	IBM	guojiannan1101@gmail.com	Beijing	guoger	Maintainer
Kewei Sun	IBM	sunkewei@cn.ibm.com	Beijing		Translator
Yueling Liang	Newell Brands	liangyl1987@hotmail.com	Shanghai		Translator
Yuan Jin	IBM	jinyuan@cn.ibm.com	Shanghai		Translator
Yaocheng Ye	Hyperchain	yaocheng.ye@hyperchain.cn	Hangzhou		Translator
Fei Cao	JBI	cophey@chainresearch.org	Nanjing		Translator
Zhu Jiang	IBM	zhujzhui@cn.ibm.com	BeiJing		Translator
Ruijun Ou	Aisino	ouruijun@aisino.com	Beijing		Translator
Min Luo	NTT	luo.min@lab.ntt.co.jp	Tokyo		Translator
Zhangjiong Xuan	Hyperchain	xuanzhangjiong@hyperchain.cn	Hangzhou	topjohn	Translator
ShaoXi Qiu	OneChain	qiushaoxi@163.com	Shanghai	qiushaoxi	Translator
Dijun Liu	CETC30	flyinox@163.com	Chengdu		Translator
Qiang Sheng	Golo	shengqiang_1001@163.com	Shenzhen	shengqiang	Translator
Dinghao Liu	Yunphant	dinghaoliu@yunphant.com	Hangzhou		Translator
Bei Wang	Yunphant	wangbei@yunphant.com	Hangzhou	wangbei	Translator
Qingpeng Cai	Yunphant	qingpengcai@yunphant.com	Hangzhou		Translator
Yunxiao Wang	Yunphant	wangyx@yunphant.com	Hangzhou		Translator
Jing Cao	Hyperchain	caojing@hyperchain.cn	Hangzhou		Translator



[https://wiki.hyperledger.org/groups/twgc/team\\_ie](https://wiki.hyperledger.org/groups/twgc/team_ie)

# Collaborations and Scenarios

- Help encourage the collaborations and adoptions
  - Collaborations between companies, organizations and projects
  - Landing more scenarios/apps

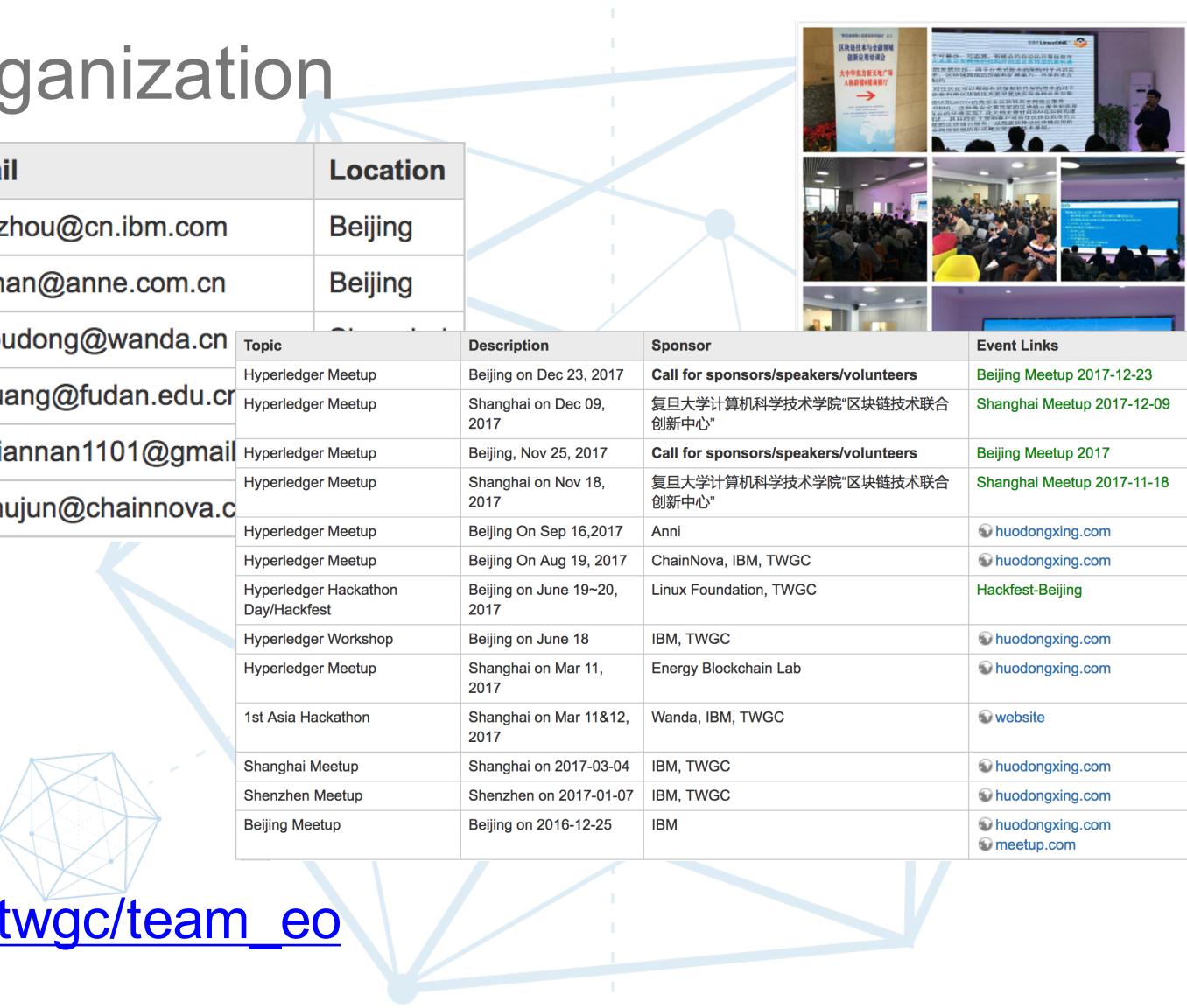
Name	Organization	Email	Location
Yin Cao	Energy-Blockchain Labs	caoyin@energy-blockchain.com	Shanghai
Bingbing Zhang	Energy-Blockchain Labs	bingbing.zhang@energy-blockchain.com	Shanghai
Kelvin Wang	Energy-Blockchain Labs	kelvin.wang@energy-blockchain.com	Shanghai
Chao Zhang	Hitachi Research	zhangc@hitachi.cn	Beijing
HaoHan.Hero	Anne inc.	haohan@anne.com.cn	Beijing
ZhaoFang Han	ArxanFintech	frank@arxanfintech.com	Beijing
Jianhua Geng	ArxanFintech	david@arxanfintech.com	Beijing
Fan Yang	ArxanFintech	tony@arxanfintech.com	Beijing
Sheng Huang	IBM	huangssh@cn.ibm.com	Shanghai

[https://wiki.hyperledger.org/groups/twgc/team\\_cs](https://wiki.hyperledger.org/groups/twgc/team_cs)



# Events Organization

- Help instruct the events organization
  - Meetups
  - Workshop
  - Hackathon
  - Hackfest



Name	Organization	Email	Location	Topic	Description	Sponsor	Event Links
Zhou Xing	IBM	xingzhou@cn.ibm.com	Beijing	Hyperledger Meetup	Beijing on Dec 23, 2017	Call for sponsors/speakers/volunteers	<a href="#">Beijing Meetup 2017-12-23</a>
Hao Han	Anne inc.	haohan@anne.com.cn	Beijing	Hyperledger Meetup	Shanghai on Dec 09, 2017	复旦大学计算机科学技术学院“区块链技术联合创新中心”	<a href="#">Shanghai Meetup 2017-12-09</a>
Zhoudong Ji	Wanda	jizhoudong@wanda.cn	Beijing	Hyperledger Meetup	Beijing, Nov 25, 2017	Call for sponsors/speakers/volunteers	<a href="#">Beijing Meetup 2017</a>
Sheng Huang	IBM	shhuang@fudan.edu.cn	Beijing	Hyperledger Meetup	Shanghai on Nov 18, 2017	复旦大学计算机科学技术学院“区块链技术联合创新中心”	<a href="#">Shanghai Meetup 2017-11-18</a>
Jiannan Guo	IBM	guojiannan1101@gmail.com	Beijing	Hyperledger Meetup	Beijing On Sep 16, 2017	Anni	<a href="#">huodongxing.com</a>
Zhujun He	ChainNova	hezhujun@chainnova.com	Beijing	Hyperledger Meetup	Beijing On Aug 19, 2017	ChainNova, IBM, TWGC	<a href="#">huodongxing.com</a>
				Hyperledger Hackathon Day/Hackfest	Beijing on June 19~20, 2017	Linux Foundation, TWGC	<a href="#">Hackfest-Beijing</a>
				Hyperledger Workshop	Beijing on June 18	IBM, TWGC	<a href="#">huodongxing.com</a>
				Hyperledger Meetup	Shanghai on Mar 11, 2017	Energy Blockchain Lab	<a href="#">huodongxing.com</a>
				1st Asia Hackathon	Shanghai on Mar 11&12, 2017	Wanda, IBM, TWGC	<a href="#">website</a>
				Shanghai Meetup	Shanghai on 2017-03-04	IBM, TWGC	<a href="#">huodongxing.com</a>
				Shenzhen Meetup	Shenzhen on 2017-01-07	IBM, TWGC	<a href="#">huodongxing.com</a>
				Beijing Meetup	Beijing on 2016-12-25	IBM	<a href="#">huodongxing.com</a> <a href="#">meetup.com</a>

[https://wiki.hyperledger.org/groups/twgc/team\\_eo](https://wiki.hyperledger.org/groups/twgc/team_eo)

100+ Volunteers

# Welcome for More Volunteers



ChainNova



HITACHI



onchain



IBM

ORACLE

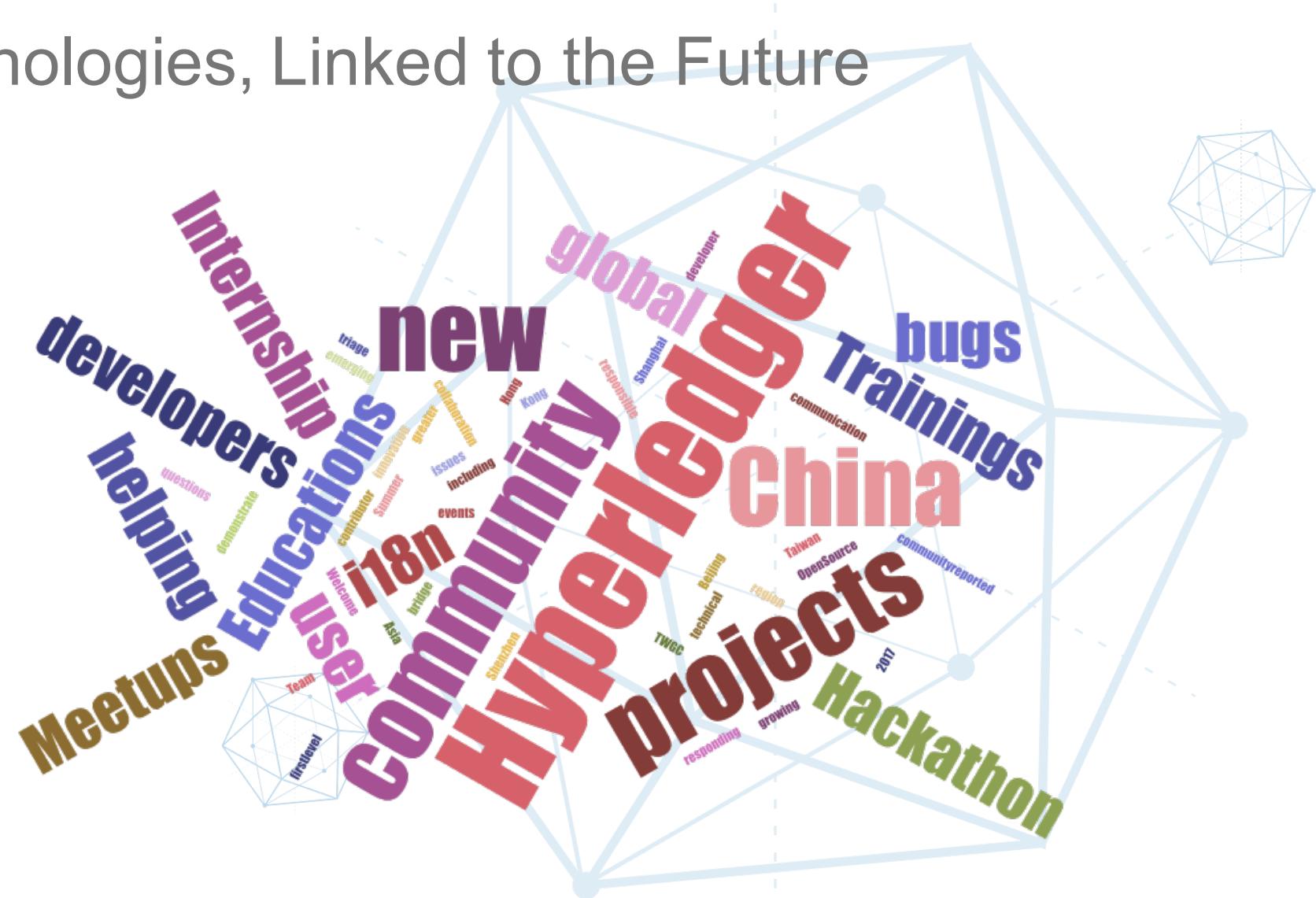


# China Members at Hyperledger Summit



# Our Vision

- Open-source Technologies, Linked to the Future
    - Trust
    - Collaboration
    - Win-Win
    - Openness



# Useful Info

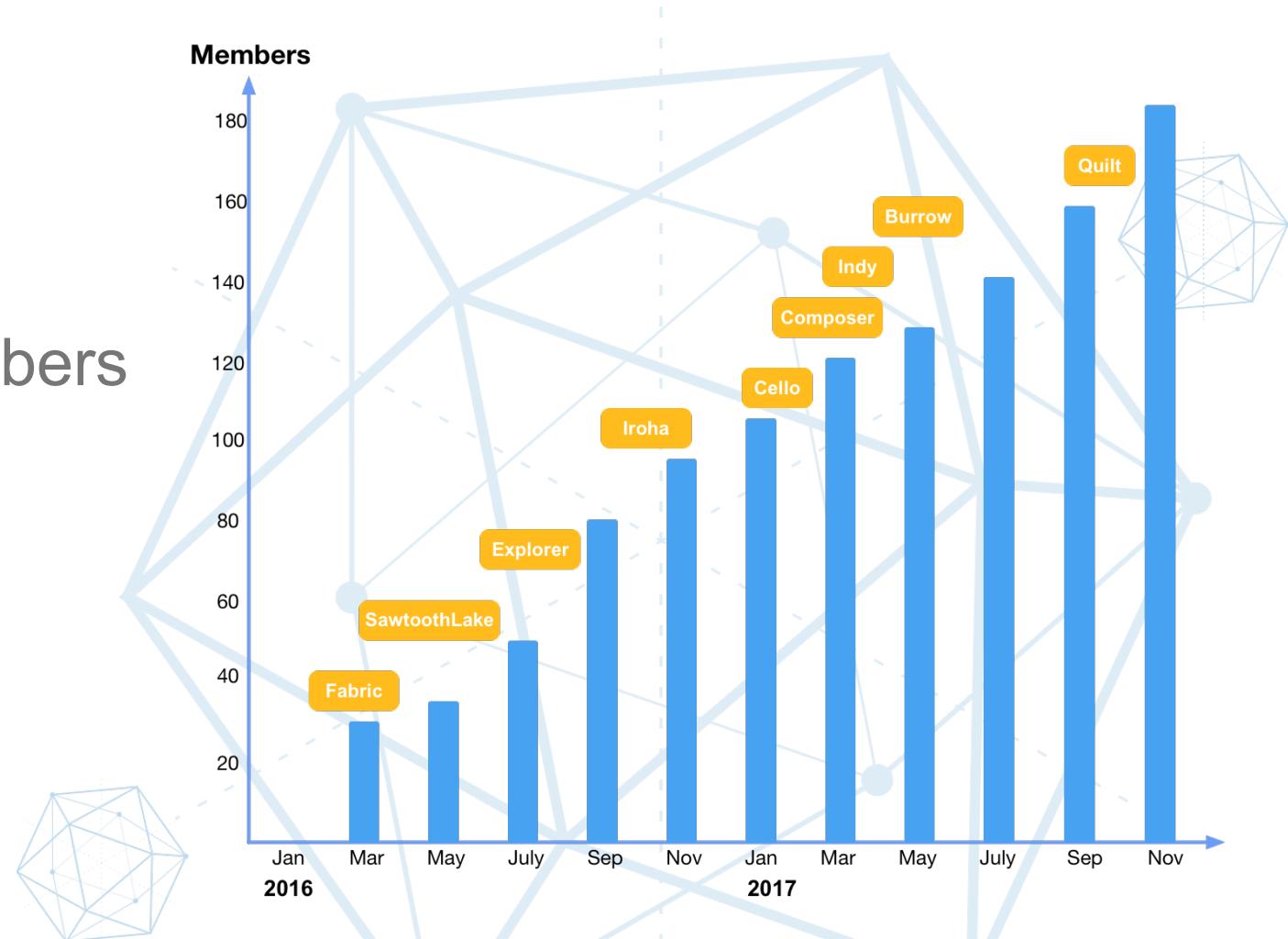
- Wikipage
  - [wiki.hyperledger.org/groups/tsc/technical-working-group-china](https://wiki.hyperledger.org/groups/tsc/technical-working-group-china)
- Email
  - [hyperledger-twg-china@lists.hyperledger.org](mailto:hyperledger-twg-china@lists.hyperledger.org)
- Online Chat
  - [twg-china](#)
  - Wechat public account: [If\\_hyperledger](#)
- Call Meetings Bi-Wednesday
  - 10AM on Wednesday



# Hyperledger Projects

- Since Dec 17, 2015
- Apache v2 License
- 30 Founding Members
- 21/44/186 Premier/China/Members
- 9 Top Projects
- 500+ Contributors
- 20000+ Commits

Enterprise grade, open source distributed ledger framework!



# New Project - Hyperledger Quilt

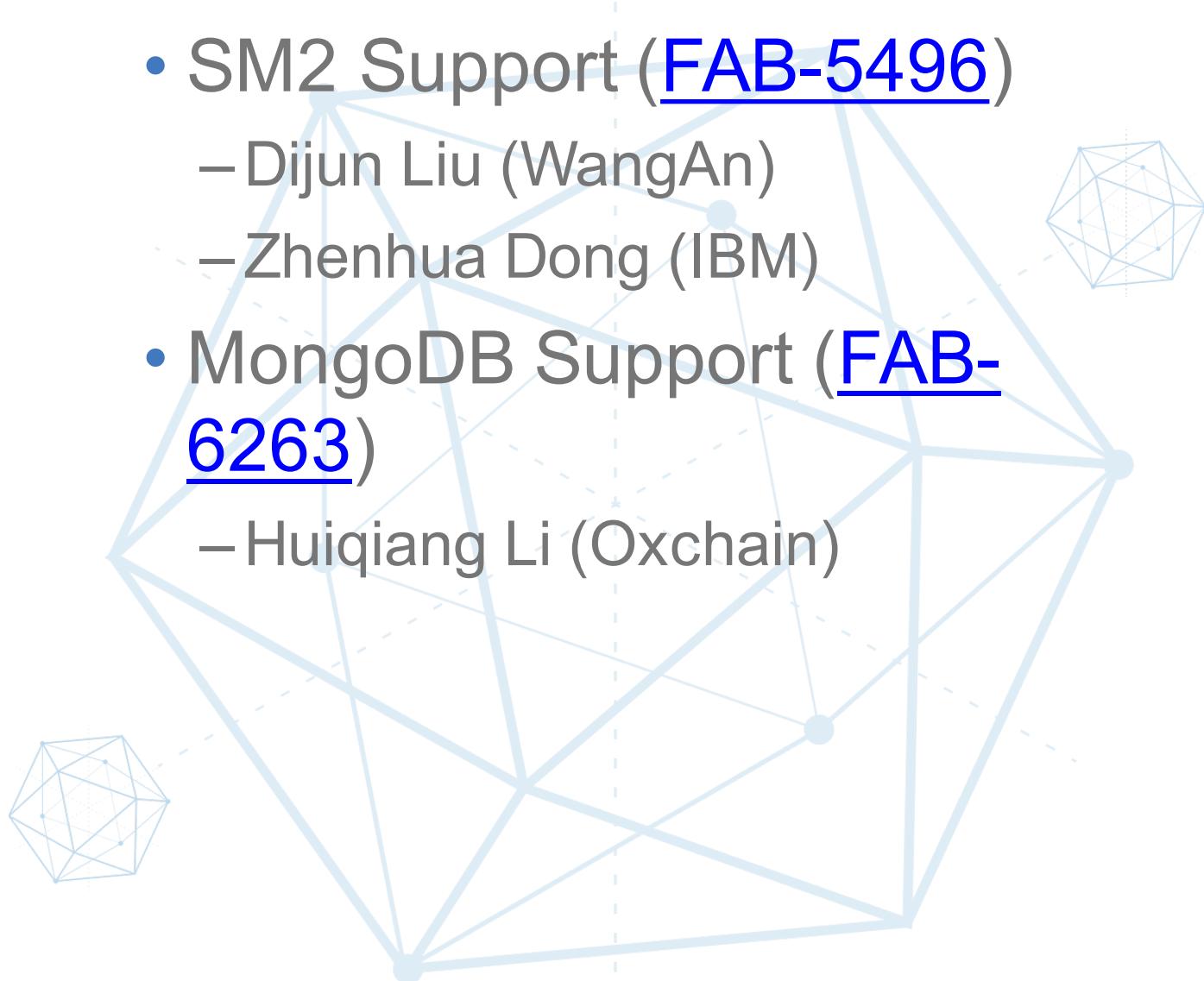
- Open-sourced at Oct, 2017
- Proposed by Everis, Ripple, Applied Payments
- Written in Java
- Key features
  - Interledger Protocol by w3c
  - Cross-chain payment transfer



# Fabric Update

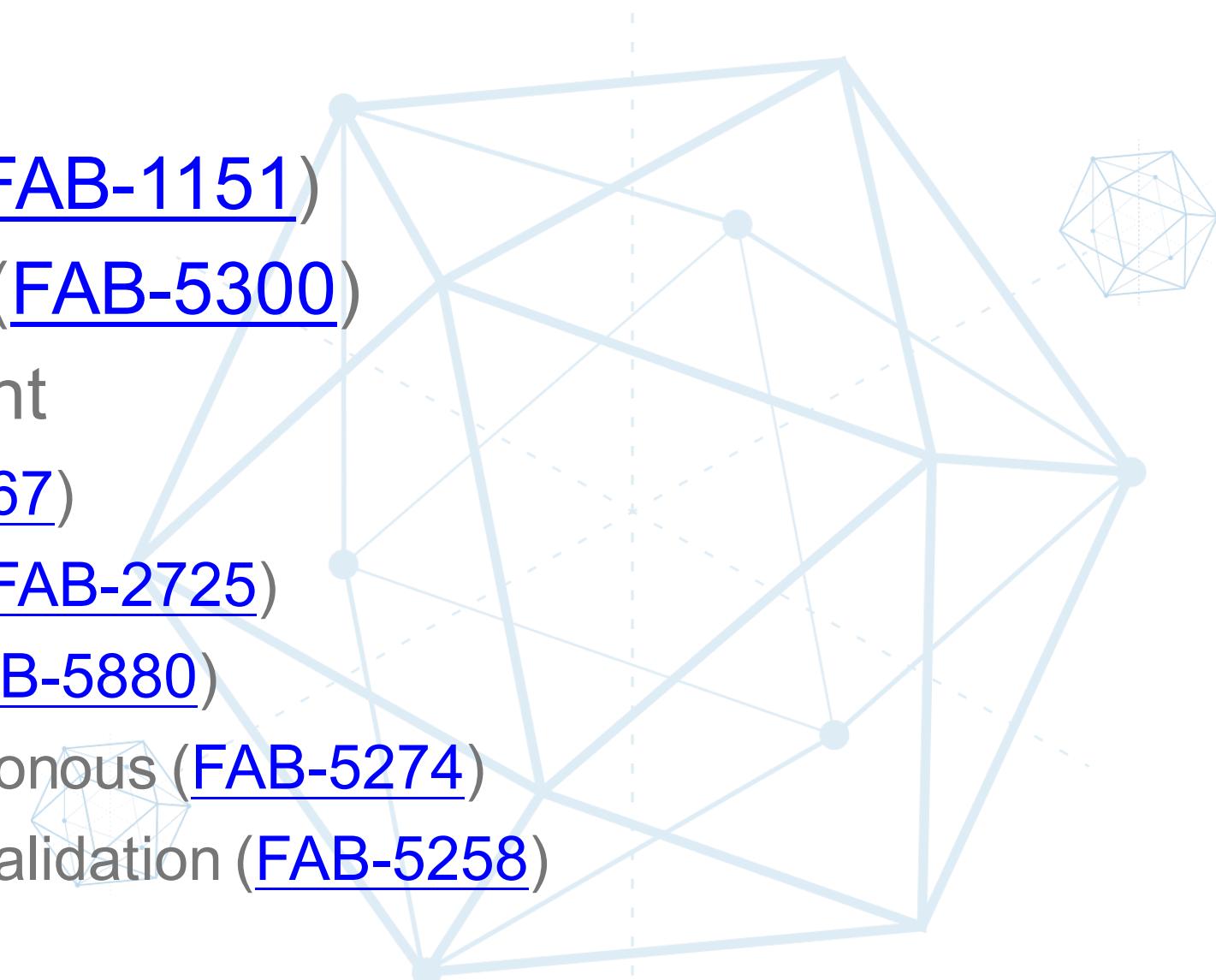
- 1.0.x branch
  - Minor bug fix on 1.0.0
  - Keep compatible with 1.0.0
- 1.1.0-preview
  - Released on Nov 02, 2017
- 1.1.0 GA
  - Q1 2018

- SM2 Support ([\*\*FAB-5496\*\*](#))
  - Dijun Liu (WangAn)
  - Zhenhua Dong (IBM)
- MongoDB Support ([\*\*FAB-6263\*\*](#))
  - Huiqiang Li (Oxchain)



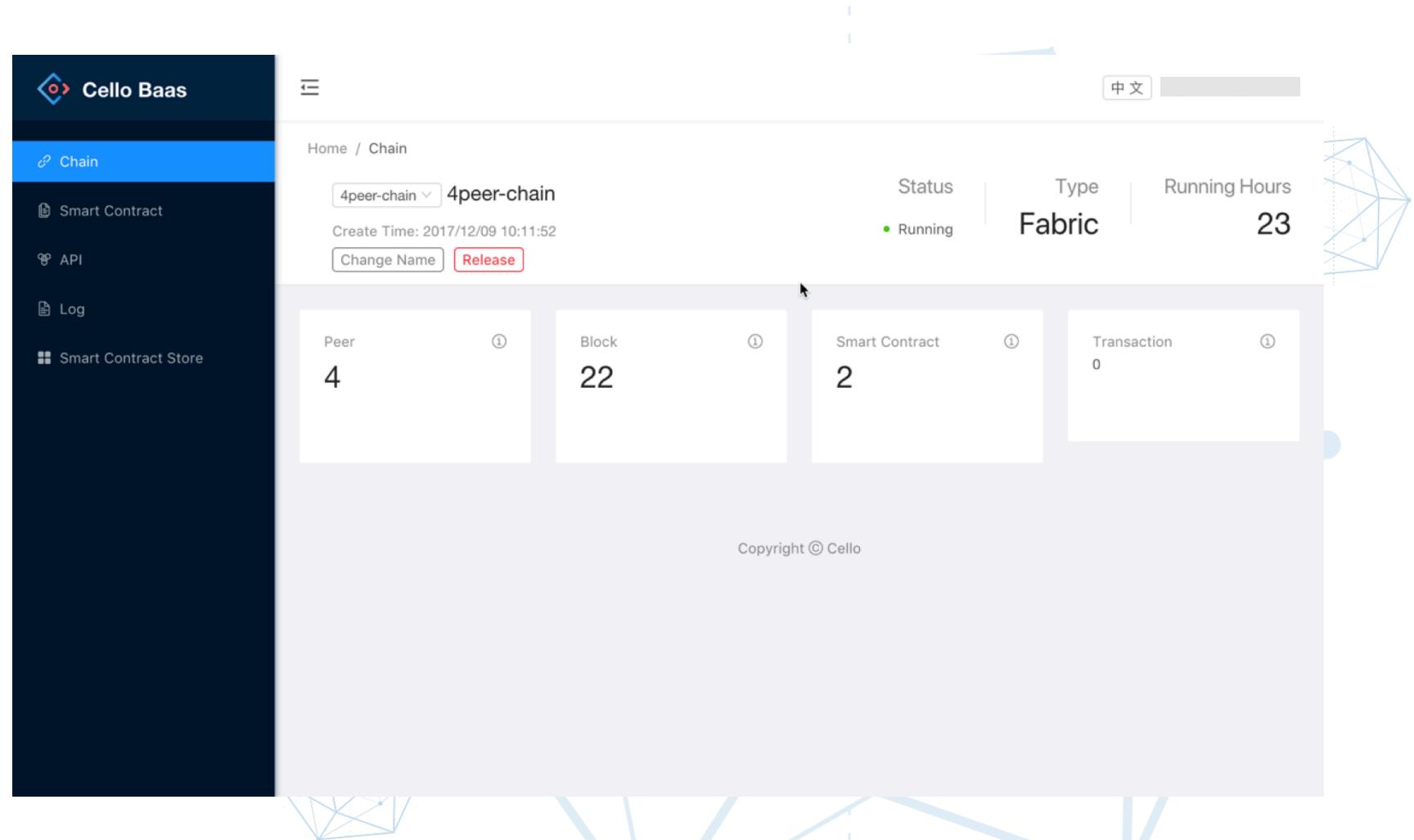
# Fabric Update – Important features for 1.1.0

- Node.JS CC ([FAB-2331](#))
- Private Ledger/side DB ([FAB-1151](#))
- Fabric-CA supports CRL ([FAB-5300](#))
- Performance Improvement
  - CouchDB Indexing ([FAB-3067](#))
  - CouchDB Bulk Operations ([FAB-2725](#))
  - MSP Validation Caching ([FAB-5880](#))
  - Orderer WriteBlock Asynchronous ([FAB-5274](#))
  - Orderer reduce duplicated validation ([FAB-5258](#))



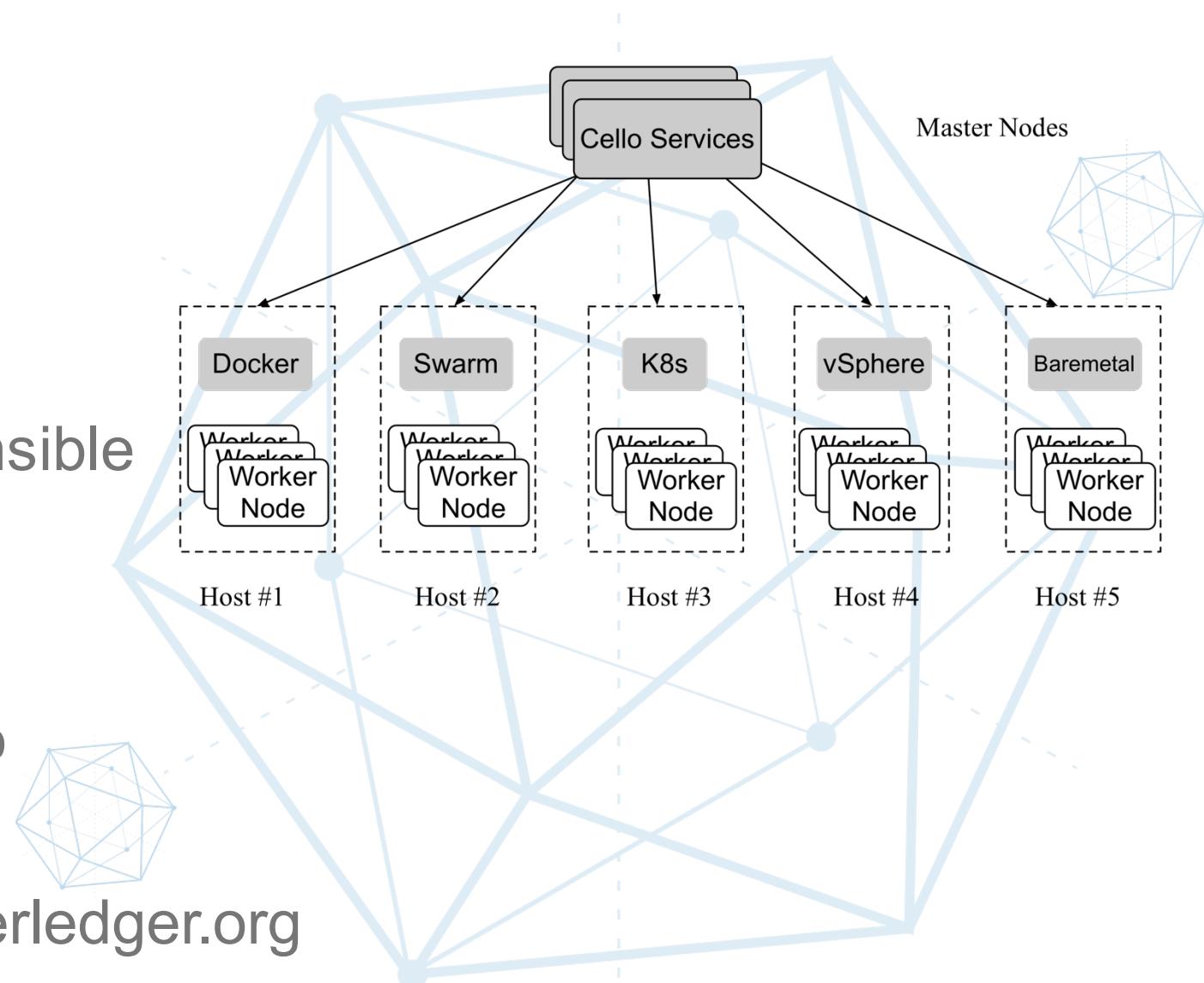
# Cello Update

- 0.6.0
  - Jun 24, 2017
- 0.7.0
  - Oct 24, 2017
- 0.8.0
  - Dec, 2017



# Cello Update

- Recent features
  - Running fabric 1.0.x
  - Support Kubernetes
  - Support vSphere
  - New worker node type via ansible
  - User dashboard (ongoing)
- Useful Links
  - [github.com/hyperledger/cello](https://github.com/hyperledger/cello)
  - [cello.readthedocs.io](https://cello.readthedocs.io)
  - [hyperledger-cello@lists.hyperledger.org](mailto:hyperledger-cello@lists.hyperledger.org)



# Sawtooth v1.0 Highlighted New Features

## Transaction Processing:

- Parallel Execution
- Multi-Language Support
  - Build apps in your language of choice

## Operations:

- Unpluggable Consensus
- Proof of Elapsed Time (PoET)
- On-chain configuration
- New Permissioning Features

## Distributed Applications:

- seth
- Sawtooth + Ethereum
- Run solidity on sawtooth
- Supply Chain
- Provenance of goods
- Telemetry / tracking

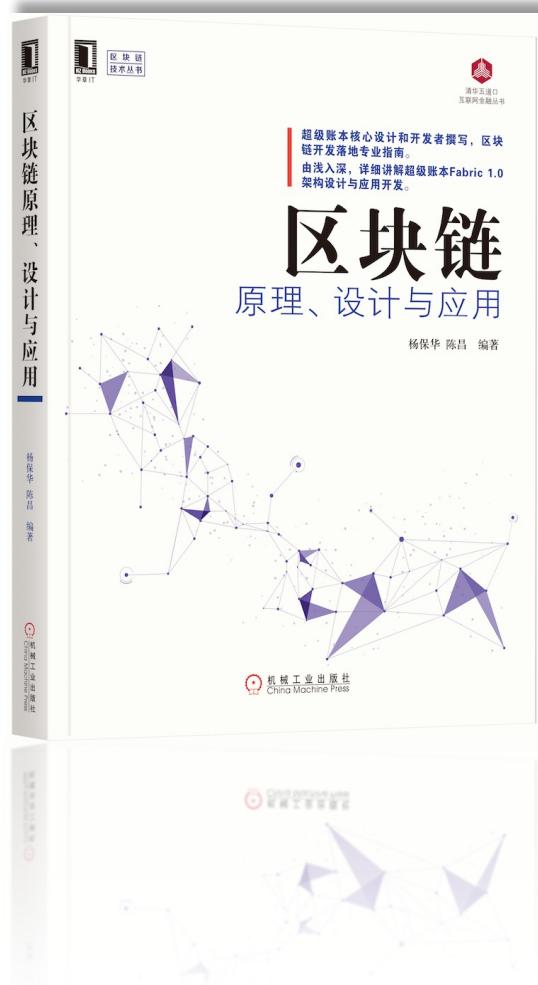
# Sawtooth Update - 01.org/sawtooth



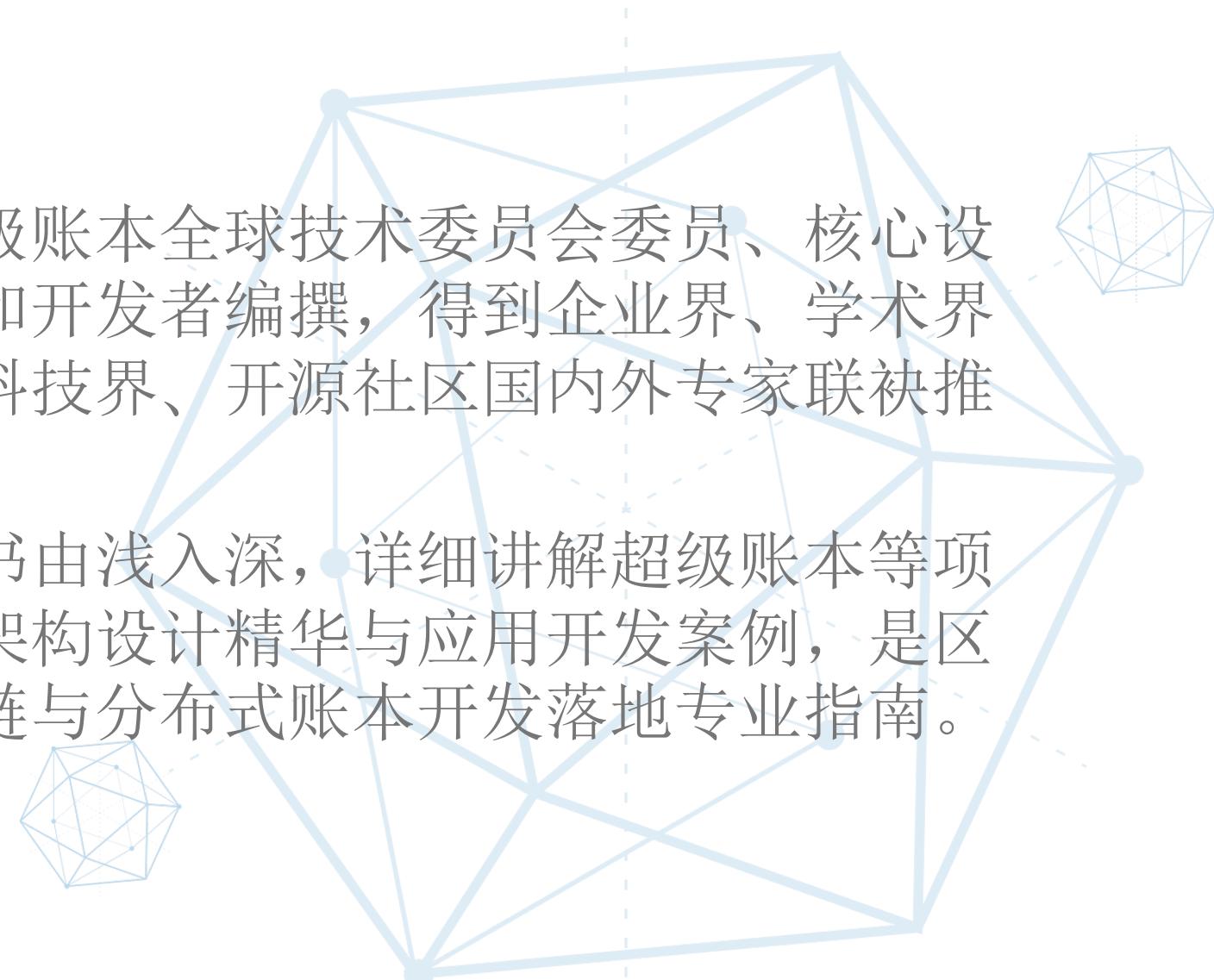
HYPERLEDGER SAWTOOTH ENTERPRISE BLOCKCHAIN  
SPEED SCALE SAFETY



# 全球首本超级账本技术图书！



- 超级账本全球技术委员会委员、核心设计和开发者编撰，得到企业界、学术界、科技界、开源社区国内外专家联袂推荐。
- 本书由浅入深，详细讲解超级账本等项目架构设计精华与应用开发案例，是区块链与分布式账本开发落地专业指南。





# Questions?

Thank You!  
**@baohua**

*Slides available at [github.com/yeasy/seminar-talk#hyperledger](https://github.com/yeasy/seminar-talk#hyperledger)*

# Reference

- [Hyperledger Project](#)
- [《区块链原理设计与应用》](#)
- [《Docker 技术入门与实战》](#)
- [超级账本 Fabric 源码剖析](#)
- [github.com/yeasy/blockchain\\_guide](#)

