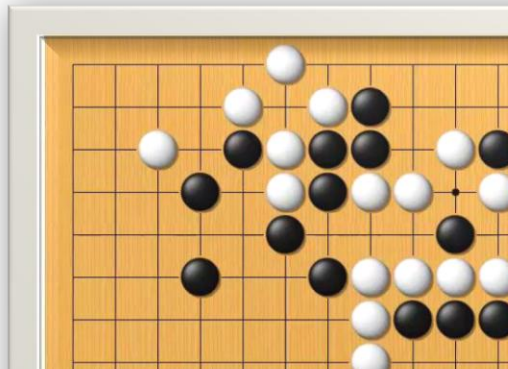# e-Science activities in Korea

Sun Kun OH (Konkuk University)

ISGC2016 (15, March, 2016)

Academia Sinica, Taipei

AlphaGo vs Lee Sedol

At Match 4, Lee wins after three consecutive losses

Responses … massmedia style: first human victory

Lee Sedol clinches first victory against Google's AlphaGo - video

Responses … social scientists style: man vs machine

▶ Technology will replace 80% of what doctors do.

▶ Computers are better at organizing and recalling complex information than a hotshot Harvard MD. (by Vinod Khosla, Fortune)

Responses … government style

▶ A taskforce was set up to build an AI roadmap within MSIP of Korea;

▶ Minister Choi of MSIP visited Samsung and LG Electronics yesterday to push for AI development;

▶ He will report the action plan to President Park in April.

Min. Choi himself interviewed

▶ In front of the AlphaGo screen.

▶ He graduated EE, and mastered computer science.

Government is more progressive, futuristic, and open-minded

▶ The catchphrases for the five strategies of MSIP are:

▶ Creative economy

▶ S&T R&D

▶ Software and contents

▶ Information and communications

▶ International cooperation

Government is more progressive, futuristic, and open-minded

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▶ International cooperation

Open data and open access

▶ Korean government asked NRF, a national funding agency, to keep all of the NRF-funded research articles open and accessible.

▶ Nevertheless, some secluded societies refuse to be online publically; share the articles only among their members.

Opposition from researchers

▶ It is not the Korean government but the researchers who oppose the open access policy.

Opposition from researchers

▶ In particular, social/human science researchers argue that it is their "right" to let or refuse their articles be downloaded/copied or sold. This has triggered debates from mainly physicists against them.

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25 Jan 2016: A project update, including a brief summary of activities in 2015, has been posted
1 Jan 2016: New members join arXiv Scientific Advisory Board
See cumulative "What's New" pages. Read robots beware before attempting any automated download

Physics

- Astrophysics (**astro-ph** new, recent, find)
  includes: Astrophysics of Galaxies; Cosmology and Nongalactic Astrophysics; Earth and Planetary Astrophysics; High Energy Astrophysical Phenomena; Instrumentation and Methods for Astrophysics; Solar and Stellar Astrophysics
- Condensed Matter (**cond-mat** new, recent, find)
  includes: Disordered Systems and Neural Networks; Materials Science; Mesoscale and Nanoscale Physics; Other Condensed Matter; Quantum Gases; Soft Condensed Matter; Statistical Mechanics; Strongly Correlated Electrons; Superconductivity
- General Relativity and Quantum Cosmology (**gr-qc** new, recent, find)
- High Energy Physics - Experiment (**hep-ex** new, recent, find)
- High Energy Physics - Lattice (**hep-lat** new, recent, find)
- High Energy Physics - Phenomenology (**hep-ph** new, recent, find)
- High Energy Physics - Theory (**hep-th** new, recent, find)
- Mathematical Physics (**math-ph** new, recent, find)
- Nonlinear Sciences (**nlin** new, recent, find)
  includes: Adaptation and Self-Organizing Systems; Cellular Automata and Lattice Gases; Chaotic Dynamics; Exactly Solvable and Integrable Systems; Pattern Formation and Solitons
- Nuclear Experiment (**nucl-ex** new, recent, find)
- Nuclear Theory (**nucl-th** new, recent, find)
- Physics (**physics** new, recent, find)
  includes: Accelerator Physics; Atmospheric and Oceanic Physics; Atomic Physics; Atomic and Molecular Clusters; Biological Physics; Chemical Physics; Classical Physics; Computational Physics; Data Analysis, Statistics and Probability; Fluid Dynamics; General Physics; Geophysics; History and Philosophy of Physics; Instrumentation and Detectors; Medical Physics; Optics; Physics Education; Physics and Society; Plasma Physics; Popular Physics; Space Physics
- Quantum Physics (**quant-ph** new, recent, find)

Mathematics

- Mathematics (**math** new, recent, find)
  includes (see detailed description): Algebraic Geometry; Algebraic Topology; Analysis of PDEs; Category Theory; Classical Analysis and ODEs; Combinatorics; Commutative Algebra; Complex Variables; Differential Geometry; Dynamical Systems; Functional Analysis; General Mathematics; General Topology; Geometric Topology; Group Theory; History and Overview; Information Theory; K-Theory and Homology; Logic; Mathematical Physics; Metric Geometry; Number Theory; Numerical Analysis; Operator Algebras; Optimization and Control; Probability; Quantum Algebra; Representation Theory; Rings and Algebras; Spectral Theory; Statistics Theory; Symplectic Geometry

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‣ Access by organization
‣ Access by year
‣ Photos - Memory of the World Register

Projects

Resources

The Annals of the Choson Dynasty

Documentary heritage submitted by Republic of Korea and recommended for inclusion in the Memory of the World Register in 1997.

This collection covers more than 470 years of the history of the dynasty, from the reign of King T'aejo (r. 1392- 1398), the founder, to the reign of King Ch'olchong (r. 1849 - 1863).

- Year of submission: 1
- Year of inscription: 19
- Country: Republic of K

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朝鮮王朝實錄

조선왕조실록

The Annals of the Joseon Dynasty

| 조선왕조실록 ▾ | | **검색** | 상세검색 | 문자입력기 |

인기검색어 芳幹 推忠定難翊戴功臣 경혜공주 어염 원자 추충정난 皇帝 김주 이숙번

태조 - 철종 ▶

- 1대 태조(1392년~)
- 2대 정종(1399년~)
- 3대 태종(1401년~)
- 4대 세종(1418년~)
- 5대 문종(1450년~)
- 6대 단종(1452년~)
- 7대 세조(1455년~)
- 8대 예종(1468년~)

- 9대 성종(1469년~)
- 10대 연산군(1494년~)
- 11대 중종(1506년~)
- 12대 인종(1545년~)
- 13대 명종(1545년~)
- 14대 선조(1567년)
  - 선조수정(1567년~)

- 15대 광해군중초본(1608년~)
  - 광해군정초본(1608년~)
- 16대 인조(1623년~)
- 17대 효종(1649년~)
- 18대 현종(1659년~)
  - 현종개수(1659년~)
- 19대 숙종(1674년~)
  - 숙종보궐정오(1674년~)

- 20대 경종(1720년~)
  - 경종수정(1720년~)
- 21대 영조(1724년~)
- 22대 정조(1776년~)
- 23대 순조(1800년~)
- 24대 현종(1834년~)
- 25대 철종(1849년~)

고종 - 순종 ▶

- 26대 고종(1863년~)
- 27대 순종(1907년~)
- 순종부록(1910년~)

| 관인별 열람 > | 관직별 열람 > | 신분별 열람 > | 선원 계보도 > | 분류색인 > | 용어색인 > |

조선왕조실록

조선왕조실록 ▼ | 검색 | 상세검색 | 문자입력기

태조실록 1권, 총서 1번째기사

태조 이성계 선대의 가계. 목조 이안사가 전주에서 삼척·의주를 거쳐 알동에 정착하다

국역 ━━━━ 원문 | 원본 보기

태조 강헌 지인 계운 성문 신무 대왕(太祖康獻至仁啓運聖文神武大王)의 성은 이씨(李氏)요, 휘(諱)는 단(旦)이요, 자(字)는 군진(君晉)이다. 그전의 휘(諱)는 이성계(李成桂)요, 호(號)는 송헌(松軒)이다. 전주(全州)의 대성(大姓)이다. 사공(司空) 휘(諱) 이한(李翰)이 신라(新羅)에 벼슬하여 태종왕(太宗王)[001]의 10대(代) 손자인 군윤(軍尹) 김은의(金殷義)의 딸에게 장가들어 시중(侍中) 휘(諱) 이자연(李自延)을 낳았다. 시중이 복야(僕射) 휘(諱) 이천상(李天祥)을 낳고, 복야가 아간(阿干) 휘(諱) 광희(光禧)를 낳고, 아간이 사도(司徒) 삼중 대광(三重大匡) 휘(諱) 입전(立全)을 낳고, 사도가 휘(諱) 이긍휴(李兢休)를 낳고, 이긍휴가 휘(諱) 염순(廉順)을 낳고, 염순이 휘(諱) 이승삭(李承朔)을 낳고, 이승삭이 휘(諱) 충경(充慶)을 낳고, 충경이 휘(諱) 경영(景英)을 낳고, 경영이 휘(諱) 충민(忠敏)을 낳고, 충민이 휘(諱) 화(華)를 낳고, 화가 휘(諱) 진유(珍有)를 낳고, 진유가 휘(諱) 궁진(宮進)을 낳고, 궁진이 대장군(大將軍) 휘(諱) 용부(勇夫)를 낳고, 대장군이내시 집주(內侍執奏)[002] 휘(諱) 이인(李隣)을 낳고, 집주가 시중(侍中) 문극경(文克謙)의 딸에게 장가들어 장군(將軍) 양무(陽茂)를 낳고, 장군이 상장군(上將軍) 이강제(李康濟)의 딸에게 장가들어 휘(諱) 이안사(李安社)를 낳으니, 이 분이 목조(穆祖)이다.

성품이 호방(豪放)하여 사방(四方)을 경략할 뜻이 있었다. 처음에 전주(全州)에 있었는데, 그 때 나이 20여 세로서, 용맹과 지략이 남보다 뛰어났다. 산성 별감(山城別監)이 객관(客館)에 들어왔을 때 관기(官妓)의 사건으로 인하여 주관(州官)과 틈이 생겼다. 주관(州官)이안렴사(按廉使)[003] 와 함께 의논하여 위에 알리

太祖康獻至仁啓運聖文神武大王, 姓李氏, 諱旦, 字君晉, 古諱成桂, 號松軒, 全州大姓也。 有司空諱翰仕新羅, 娶太宗王十世孫軍尹金殷義之女, 生侍中諱自延。 侍中生僕射諱天祥, 僕射生阿干諱光禧, 阿干生司徒三重大匡諱立全。 司徒生諱兢休, 兢休生諱廉順, 廉順生諱承朔, 承朔生諱充慶, 充慶生諱景英, 景英生諱忠敏, 忠敏生諱華, 華生諱珍有, 珍有生諱宮進, 宮進生大將軍諱勇夫, 大將軍生內侍執奏諱隣。 執奏娶侍中文公諱克謙之女, 生將軍諱陽茂, 將軍娶上將軍李公諱康濟之女, 生諱安社, 是爲穆祖, 性豪放, 有志四方。 初在全州, 時年二十餘, 勇略過人。 山城別監入館, 因官妓事, 與州官有隙, 州官與按廉議上聞, 發兵圖之。 穆祖聞之, 遂徙居江陵道 三陟縣, 民願從而徙者, 百七十餘家。 嘗造船十五隻以備倭。 旣, 元 也窟大王兵侵諸郡, 穆祖保頭陀山城以避亂。 適前日山城別監, 新除按廉使, 又將至。 穆祖恐禍及, 挈家浮海, 至東北面宜州【卽德原〔德源〕。】止焉。 民一百七十餘戶亦從之, 東北之民, 多歸心焉。 於是, 高麗以穆祖爲宜州兵馬使, 鎭高原以禦元兵。 時雙城以北,【雙城卽永興。】屬于開元路。 元 散吉大王來屯雙城, 謀取鐵嶺以北, 再遣人請穆祖降元, 穆祖不得已率金甫奴等一千餘戶降。 前此, 平壤民聞穆祖威望, 多有附者。 至是與從之, 散吉大喜, 禮待甚厚, 置盛宴歡飮。 將罷, 散吉親以玉杯, 納諸穆祖懷中曰: "公之家人, 安知吾二人相與之至情! 聊以玉杯表吾情耳。" 因相與誓曰: "自後無相忘也。" 穆祖乃以族女妻散吉。 穆祖由水陸路至時利,【卽利城。】其千戶以兵阻之。 穆祖語以歸順之意, 千戶宴慰甚厚, 穆祖亦以牛馬報之。 遂至開元路 南京之斡東居焉。 是宋 理宗 寶

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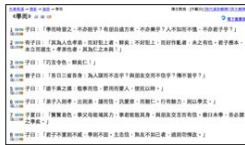**歡迎**

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最新消息

日期	內容
2015-07-02	統一碼8.0升級，增加新漢字字形 統一碼標準最近推出新版本，增加了數千新的罕見字、異體字。本站字典功能現已支持這些新字的查詢，使用者安裝花園字體的最新版本即可顯示這些新增字形。許多新增字形屬於「CJK擴展E區」；您可以參考字體試驗頁面以確認您的系統是否支持這些字。
2015-03-24	字符識別和電子圖書館連結：首次提供千萬頁的傳世文獻全文檢索 通過對電子圖書館收藏的一千多萬頁傳世文獻影印版進行字符識別，本站功能已大規模升級，如今已將三千多本電子文本與其對應底本新增連結，提供圖文對照和影印底本的全文檢索。 除此之外，一萬多部新的文獻或版本已通過字符識別而打造了初稿文字版。雖然初稿必定會有錯字，但通過初稿能夠首次在大量影印資料中進行全文檢索以快速查閱其中的內容。所有新創文字版已增加到維基區之中；在此懇求各位在使用之際積極參與共同校對工作。 詳情請參考文字識別相關使用說明。

完整的更新記錄存放於最新消息討論區。

最新討論主題

日期	內容
2016-03-12 發言者stwcsigma	[彷][死]有別乎 我筆蜜螢幕顯現 嗵：目蔽垢也，從見 [彷]我手邊的文本[死] 請協助解辨是 [更多...]
2016-03-10 發言者fitzcarl	would like to add How can I add Li S
2016-03-10 發言者oao1006	高士传里，颜回篇，[官商之音，官汝為宮

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- 先秦兩漢
  - 儒家
  - 墨家
  - 道家
  - 法家
  - 名家
  - 兵家
  - 算書
  - 雜家
  - 史書
  - 經典文獻
  - 字書
  - 醫學
  - 出土文獻
- 漢代之後
  - 魏晉南北朝
  - 隋唐
  - 宋明
  - 清代
  - 民國
- 簡介說明
- 相關資料
- 字典
- 討論區
- 圖書館
- 維基

📕 国文学研究資料館 National Institute of Japanese Literature　　検索　　アクセス　English

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列の一行目のセルをクリックした後、別の列の一行目のセルをShiftキーを押しながらクリックすれば、「館蔵」と「画像」など複数の列をキーにした並び替えができます。
データベース名の右の概要ボタンをクリックすると、そのデータベースの概要を表示します。closeボタンのクリックで概要を閉じます。

	データベース名	館蔵 ▲	画像 ▲	本文 ▲	史料 ▲	付記 ▲	最終更新 ▲
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2	国文学論文目録データベース 概要					事業	2015/11/19
3	日本古典籍総合目録データベース 概要		画像			事業	2015/11/06
4	館蔵和古書目録データベース 概要	館蔵	画像			事業	2015/11/26
5	古典選集本文データベース 概要		画像	本文		事業	2010/06/14
6	所蔵機関との連携による日本古典籍デジタル画像データベース 概要		画像			事業	2012/02/29
7	日本古典資料調査データベース 概要					事業	2015/06/02

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1　序太宗文皇帝實錄

2　自實錄序至目錄據抱經樓本補

3　朕惟古之為天下國家者必建史官左右史分記言動唐以 來朝廷紀述祖宗時事有實錄則合左右史之所記凡功德 之大政務之要以及其臣之言行有關治體者皆在焉天佑皇明我太祖高皇帝興洪業武功文德之盛見諸史官之所紀者彰彰 矣皇祖太宗文皇帝以至仁大聖奠安宗社君主華夷覃霈恩澤一視同仁禮樂文明之化弘被遐邇乾坤之內日月 之所照臨四裔君長悉臣悉順朝覲貢獻之使接踵道路稽 顙闕下者無虛日建官府授封爵逾數十萬里之外德威廣被古所未有何其盛也朕嗣位之初啟秘府之藏徵百 司之紀特命儒臣纂修實錄而臨之以重臣閱歷五年始克 成編蓋慎重之至也凡百三十卷惟我皇祖聖德神功如天地之崇高廣大包含覆載變化神妙誠非 言語所能刑應作形容繪畫所能仿佛者然絲應作緣跡以求其 心即心以考其道庶幾可得於萬一焉大抵天地之化四時 行焉春生夏長仁也秋斂冬藏義也仁以育之義以肅之聖 人之化亦猶是已夫有天下國家之任者誠考於是編法仁 以施愛法義以興治將宗社子孫生民之福綿永於千萬年嗚呼懋敬之哉謹序

4　宣德五年正月二十一日

5　進實錄表

6　奉天靖難推誠宣力輔運武臣特進光祿大夫左柱國太 師英國公臣張輔等誠惶誠恐稽首頓首上言臣聞上有堯舜禹湯文武之君斯有典謨訓誥誓命之 紀當時所錄萬世攸師自漢以來暨於唐宋皆建史官專 職記述我國家奉天啟運聖聖相承 大經大法明於上 善政善教被於下萬方一統海宇清寧洪武以前神功聖德史氏所記具有成書欽惟太宗體天弘道高明廣運聖武神功純仁至孝文皇帝 剛健中正 廣大高明體天之心行天之道 勵精為理 躬儉愛人 載奠邦家 中興鴻業 文治光昭於日月 武烈弘靖於華夷 大略雄材 茂功偉績 規模宏遠卓冠百王欽惟仁宗敬天體道純誠至德弘文欽武章聖達孝昭皇帝 孝友英明 寬仁恭儉敬天法祖制治保邦 明目達聰周詢民隱時使薄斂 博施濟人 撫盈成之運 廣文明之化 丕新政紀 覃敷德澤期月之內天下歸仁二聖升游疑應作遐仰 雲車之益遠萬姓哀慕在海宇以同情恭惟皇帝陛下自皇字起至第五面第十 一行卷字止抱本誤接第二面第八行人字下今據宣宗實錄改正 文武聖神 聰明睿知纘承 大寶 君國子民 推廣至仁繼志述事歌九功之惟敘得萬國之歡心上念祖宗功德之隆同符天地覆載之大宜宣昭於簡冊垂儀範於 帝王宣德元年五月 敕修兩朝實錄命臣輔臣義臣原吉監修臣士奇臣榮臣幼孜臣山 臣瑛臣溥總裁臣縈臣英臣直臣述臣時勉臣習禮臣學 鑋臣循臣從善臣驥臣衮臣鶴齡臣洪臣永清臣敍臣曰 恭臣敬臣翰臣雅臣纛臣繼臣中臣叔剛臣文奎臣節臣 錫臣萼纂修發左右史臣之所記閱中外官府之所上兼 考章＜嫏嬛-金 ＞參之見聞編載事功必備著其本末纂述 謨訓必致謹於精微關制度者雖細不遺切幾務者雖明必 審於紀敍聖神之道德如繪畫造化之功能儀疑應作儗諸刑疑應作形容誠難仿 佛乃若附錄臣下必在推明是非訖五年正月恭成太宗文皇帝實錄百三十卷仁宗昭皇帝實錄十卷合百五十四冊謹繕寫 上進伏念臣輔等智識淺陋學術空疏曠歲月而久稽亦討 論之惟謹方之良史深愧乏三長之稱 監於先朝庶少資 萬幾之暇臣輔等無任瞻天仰聖激切屏營之至謹 奉 表隨 進以聞

7　宣德五年正月二十一日奉天靖難推誠宣力輔運武臣

8　特進光祿大夫左柱國太師英國公臣張輔等謹上表

9　修纂官

10　監修 奉天靖難推誠宣力輔運武臣特進光祿大夫左柱國太 師英國公 臣張 輔 榮祿大夫少師兼吏部尚書 臣蹇 義 榮祿大夫少保兼太子少傅 戶部尚書 臣夏原吉 總裁 榮祿大夫少傅兵部尚書兼華蓋殿大學士 臣楊士奇 資善大夫太子少傅工部尚書兼謹身殿大學士 臣楊 榮 資善大

RDA

- ► The 7th plenary meeting of RDA (Research Data Alliance) was held in 1-3, March, in Tokyo.

- ► Hosted and co-organized by the Japan S&T Agency under the theme "Making data sharing work in the era of Open Science."

- ► 4 KISTI personnel attended (But KISTI itself is not the member of RDA.)

e-Science in Korea: players

▶ Government (=MSIP, Ministry of Science, ICT and Future Planning)

▶ Research institution (=KISTI, Korea Institute of S&T and Information)

▶ Community people (=Mainly scientists)

▶ Ordinary publics

MSIP endorses KISTI to

▶ Build and utilize state-of-the-art national information infrastructure;

▶ Resolve pending social issues and support national projects with convergence research;

▶ Establish a value-adding management system;

▶ Build a vibrant and energetic organizational culture.

KISTI has 4 divisions for R&D services

▶ Supercomputing [But the fastest supercomputer in Korea is owned by the Korea Meteorological Agency.]

▶ Advanced information convergence

▶ Convergence technology research

▶ SMEs innovation

KISTI helps HEP community

- LIGO, RENO (neutrino experiment), Belle2 at KEK, CMS and ALICE at CERN, etc. are supported by the computing resources of KISTI.

- Networking, storage, and Cores are allocated for each experiments.

- For experiments at CERN LHC, KISTI operates T1 center.

Tier 1 center in WLCG
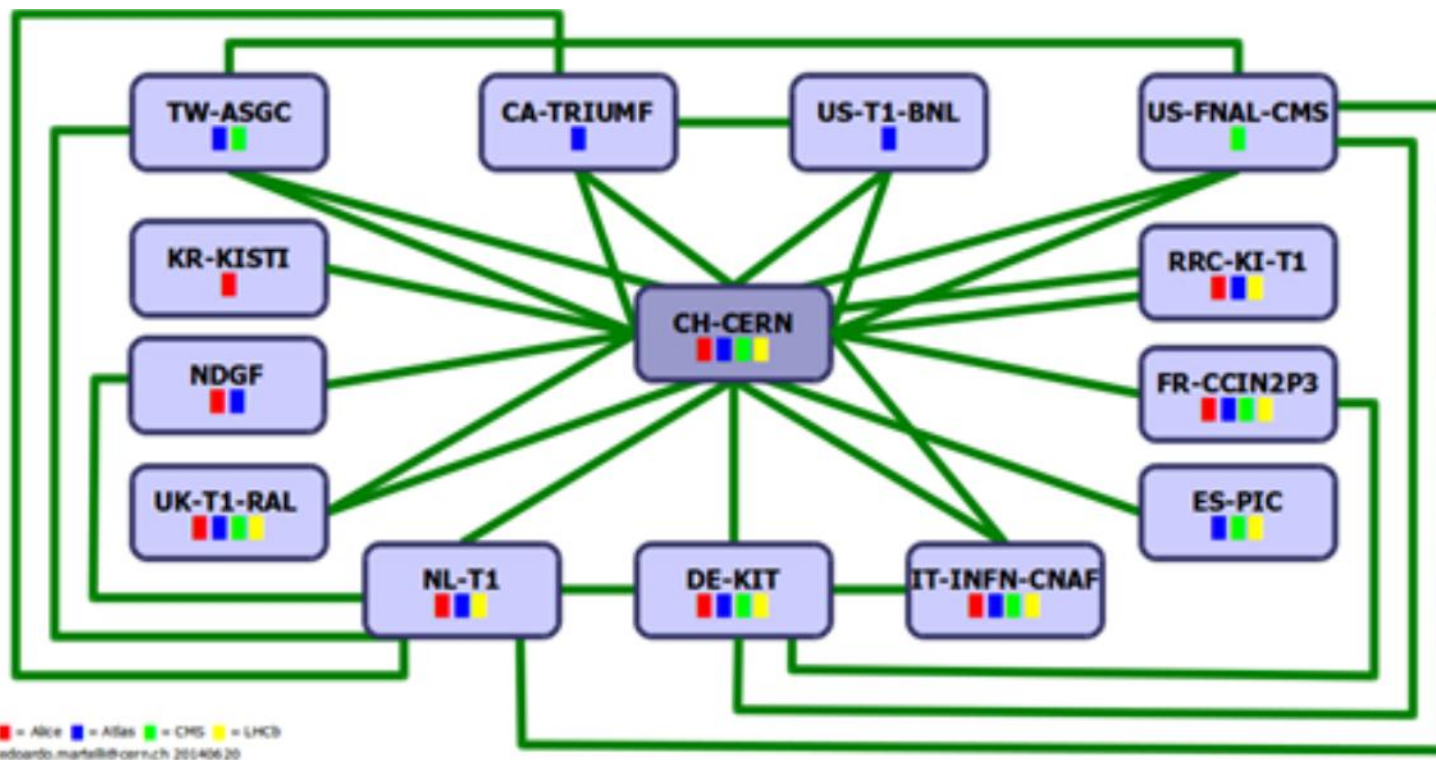
10G Network
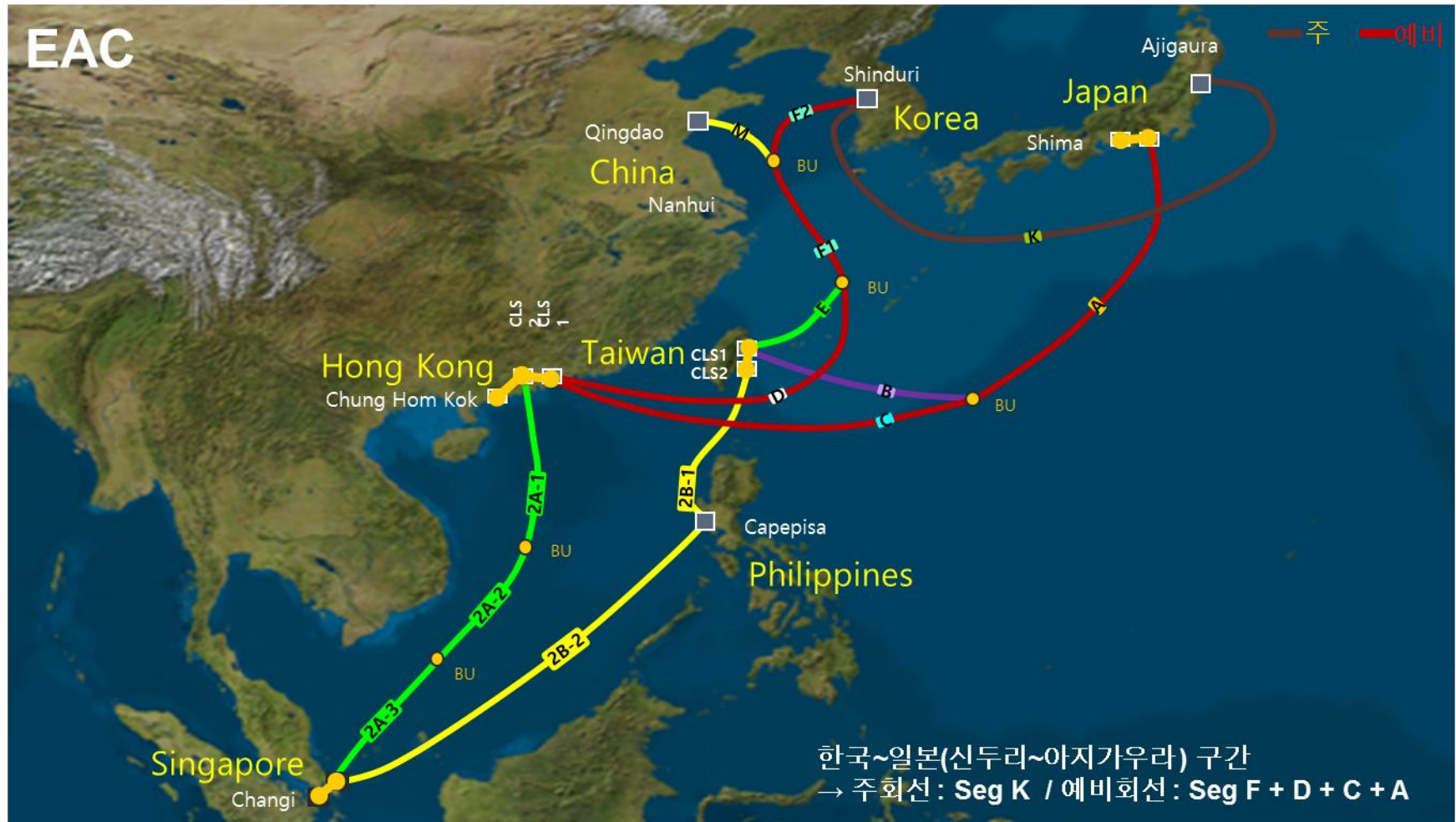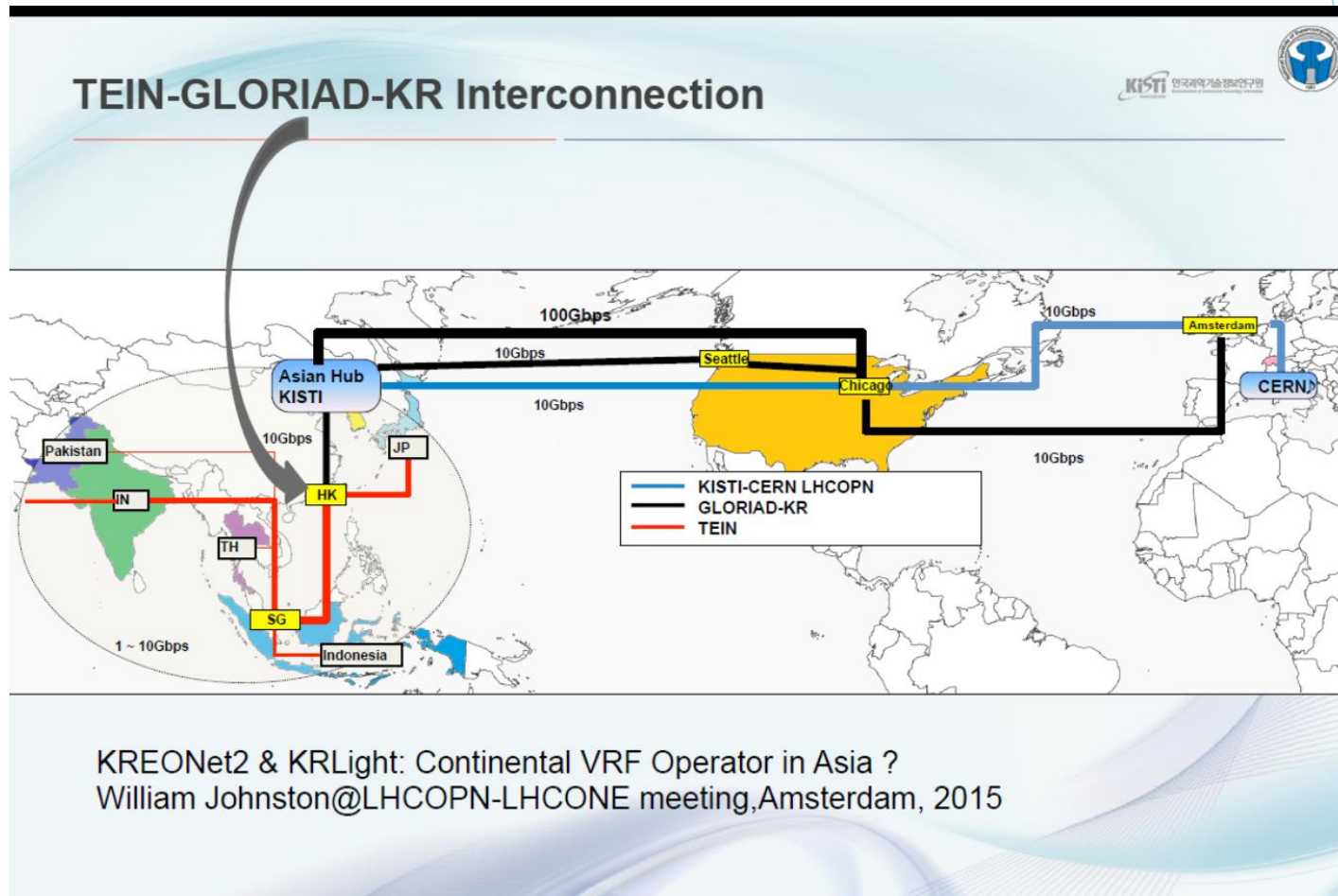
10G Network
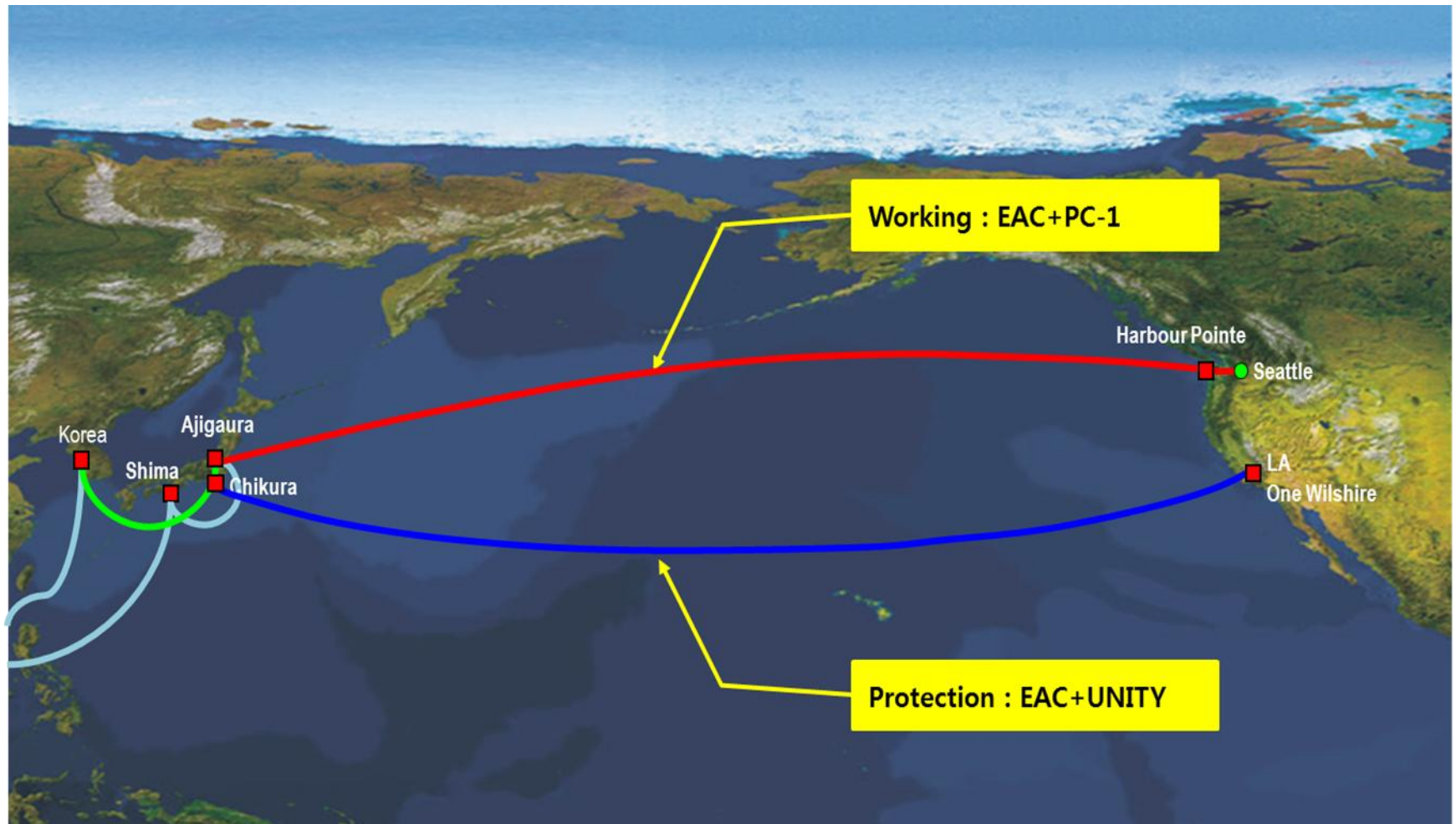
Connection

TEIN-GLORIAD-KR Interconnection

KREONet2 & KRLight: Continental VRF Operator in Asia ?
William Johnston@LHCOPN-LHCONE meeting, Amsterdam, 2015

Connection

A part of the Network

A Network, Asian one
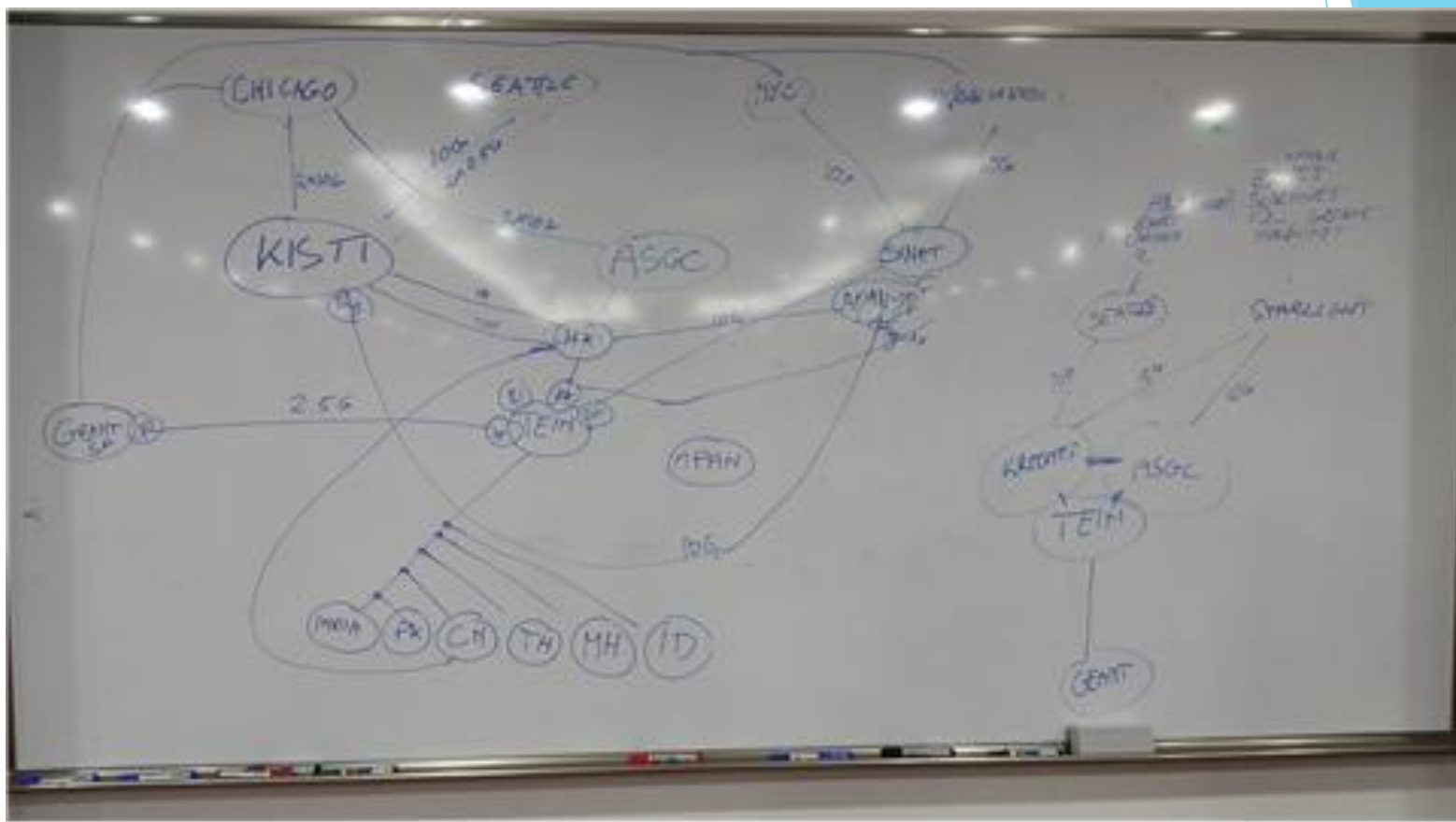
Asia Tier Center Forum

- ▶ KISTI hosted the 2015 Forum.

- ▶ SUT, Nakhon Ratchasima, Thailand will host the next Forum.

- ▶ Date: November? September? 2016

▶ At AFAD 2016 (7th Asian Forum for Accelerators and Detectors, Uji Campus, Kyoto University, Kyoto, Japan) Dr. Buseung CHO reported that GLORIAD and TEIN has been successfully connected.

TEIN-GLORIAD-KR (KREONet2) Interconnection

- Both are col-located in Megai-advantage
  - ✓ GLORIAD-KR MX960: MEGA-TOP(32/F)
  - ✓ TEIN M120: 8/F

- Interconnection : 1G -> 10G (Coming)
  - ✓ Short-term: 1G (Done)

It may be the future of ATCF