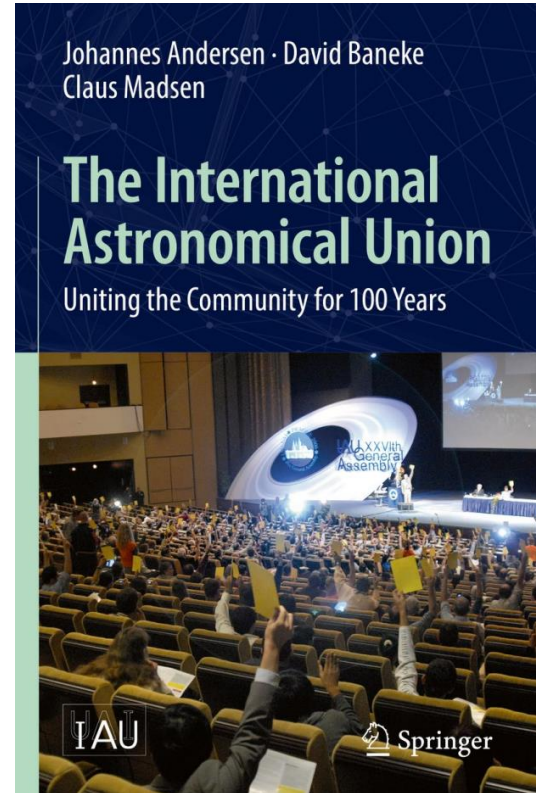
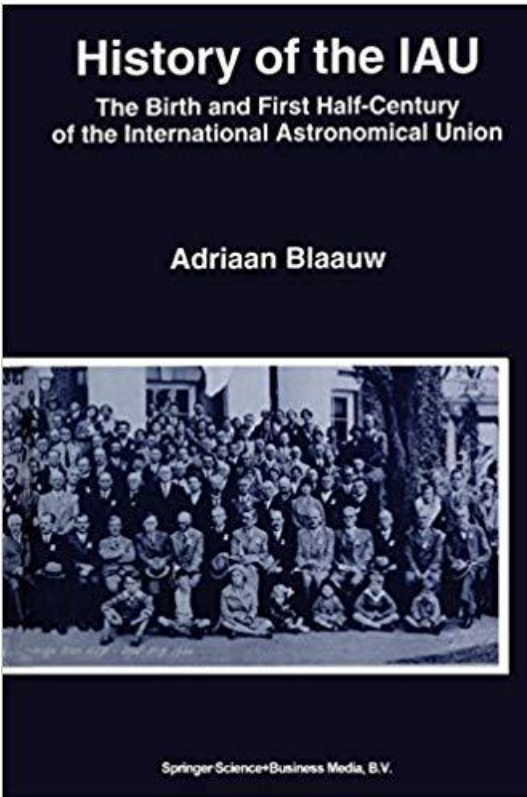


Bojan Arbutina

***Katedra za astronomiju, Matematički fakultet,
Univerzitet u Beogradu***

***Osnivanje
Međunarodne astronomske unije
i priključenje Jugoslavije***

Beograd, SANU, 16. maj 2019.



- Blaauw (1994), Andersen et al. (2019)
nekoliko lanaka (Campbell 1919, Stebbins 1919, *Under One Sky* - IAUS 349)
- IAU Transactions B . ve inom digitalizovani (Cambridge Univ. Press)
https://www.iau.org/publications/iau/transactions_b/

- I konferencija savezni kih akademija (*Inter-allied Conference on International Scientific Organizations*), London, 9-11. oktobar 1918.

INTER-ALLIED CONFERENCE ON INTERNATIONAL ORGANISATIONS.
—The following is a list of the delegates appointed to attend the Inter-Allied Conference on International Scientific Organisations, which was held at the Royal Society on October 9-11:—

GREAT BRITAIN:—Sir Joseph Thomson, Sir Alfred Kempe, Prof. A. Schuster, W. B. Hardy, Prof. W. A. Herdman, Sir Frank Dyson, J. H. Jeans, Col. H. G. Lyons, Prof. C. S. Sherrington, Sir William Tilden, Sir E. S. Schafer, Prof. J. A. McClelland.

BELGIUM:—Major Lacointe, Director of the Royal Observatory of Belgium; M. Massart, Professor of Botany at the University of Brussels, Professeur de la Vallée Poussin.

FRANCE:—B. Baillaud, Director of the Observatory of Paris; G. Bigourdan, Astronomer at the Observatory of Paris; A. Haller, Professor of Organic Chemistry at the Sorbonne; M. Lacroix, Secretary of the Académie des Sciences, Professor of Mineralogy at the Sorbonne; Ch. Lallemand, Director of the Trigonometrical Survey; Ch. Monreux, Professor of Pharmaceutical Chemistry at the Ecole Supérieure; Emile Picard, Secretary of the Académie des Sciences, Professor of Mathematics at the Sorbonne.

ITALY:—Vito Volterra, Professor of Mathematical Physics at the University of Rome, Member of the Italian Senate.

JAPAN:—Joji Sakurai, Professor of Chemistry at the University of Tokyo; Aikitsu Tanakadate, late Professor of Physics at the University of Tokyo.

PORTUGAL:—Professor Braamkamp Freire, President of the Academy of Science, Lisbon.

UNITED STATES:—H. A. Bumstead, Professor of Physics at Yale University; Col. J. J. Cartv, Chief Engineer of the American Telegraph and Telephone Company; W. J. Durand, Professor of Mechanical Engineering at Stanford University; S. Flexner, Director of the Rockefeller Medical Institute; G. E. Hale, Director of the Mount Wilson Observatory; A. A. Noyes, Professor of Chemistry at the Massachusetts Institute of Technology.

- *The Observatory* (1918), 41, 414.

Bogdan Popovi ,
Jovan Žujovi

- II konferencija savezni kih akademija, Pariz, 26. nov. . 1. dec. 1918.

national Associations on a new basis was proceeded with. It was decided that an International Research Council should be formed, in whose hands the whole work of international cooperation in science could be placed; the conference of the inter-allied delegates assumed provisionally the functions and title of such a council. An executive committee of five members was appointed, constituted as follows:—President, M. Émile Picard, one of the permanent secretaries of the Académie des Sciences; Secretary, Prof. A. Schuster, representing the Royal Society of London; Dr. George E. Hale, representing the National Research Council of the U.S.A.; Prof. Volterra, representing the Accademia dei Lincei; Major Lecointe, representing Belgium. The administrative bureau of the committee is to be established in London.

It was decided that the following countries should join in the foundation of the various scientific associations, which should be under the control of the National Research Council:—Belgium, Brazil, France, Great Britain, United States, Australia, South Africa, Canada, New Zealand, Greece, Italy, Japan, Poland, Portugal, Roumania, and [redacted] when an association has once been

- *The Observatory* (1919), 42, 94.

- Mihailo Petrovi i Jovan žujovi (Petrovi 1920, *Srpski književni glasnik*, I(1), 130; Trifunovi 1967, *Matematički vesnik*, 4(19), 94)

- III konferencija saveznih akademija, Brisel, 18-28. avgust 1919.

- International Research Council (1919-1931)

- Izvršni komitet IRC

...Emile Picard, President (France, mathematician and Permanent Secretary of the Academie des Sciences, who had lost a son in the war), G.E. Hale (USA, astronomer), Georges Lecointe (Belgium, Navy officer and astronomer), Vito Volterra (Italy, mathematician), Vice-Presidents; Arthur Schuster (Great Britain, physicist and astrophysicist, Secretary of the Royal Society), General Secretary. ([Montmerle 2019](#))

- International Association of Academies (1899-1914)

- International Council of Scientific Unions (1931-1998), International Council for Science (1998-2018), International Science Council (2018-)

- delegati 1919: Belgija 101, Kanada 2, SAD 27, Francuska 45, Velika Britanija 18, Italija 15, Novi Zeland 1, Poljska 1, Rumunija 2, Srbija 2. ([Campbell 1919](#))

- **Mihailo Petrović** i **Jovan Cvijić** ([Petrović 1920](#), [Trifunović 1967](#))



Mihailo Petrović (1868-1943)

Profesorov lik iz 1919. godine, neposredno pred polazak za Brisel na 3. konferenciju predstavnika naučnih ustanova savezničkih država (Arhiv Srbije, porodični album prof. Mihaila Petrovića; autor fotografije nepoznat).

Sabrana dela Mihaila Petrovića VII (1999) Zavod za udobenike, Beograd

- raspoloženje na kraju I svetskog rata . povlačenje iz dotadaznjih međunarodnih kolaboracija, osnivanje novih od strane zemalja saveznica, uz kasniji poziv neutralnim zemljama, centralne sile isključene.

“I heartily endorse the sentiments expressed by Monsieur Picard and by Mr. W.W. Campbell. Science is the highest expression of a civilization. Allied Science is, therefore, radically different from Teutonic Science. It is true that the highest aim in Science is to disassociate itself from all its anthropomorphic elements, but we are still very far from that ideal goal. - - - I am heartily in favor of sending several representatives of the National Academy of Sciences to the meeting with the Royal Society - - -.” (Pupin, physicist, Columbia University [27]). Blaauw (1994)

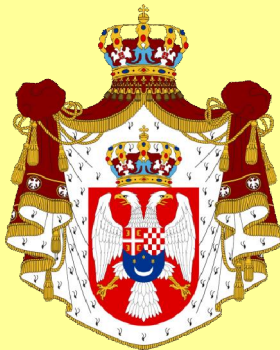
- donekle opre na mišljenje G.E Halea, direktora opservatorije Mt. Wilson (koosniva i urednik časopisa Astrophysical Journal 1895, inicijator osnivanja opservatorija Yerkes, Mt. Wilson, Mt. Palomar, brojnih organizacija: American Astronomical Society 1899, International Union for Cooperation in Solar Research 1905-1913, National Research Council 1916) i W.W. Campbella, direktora opservatorije Lick.

- **International Astronomical Union (28 aug. 1919)**

- **Izvršni komitet IAU**

... the President Benjamin Baillaud (1848. 1934), the General Secretary Alfred Fowler (1868. 1940) and four Vice-presidents: the American, William Campbell (1862. 1938), the Briton, Frank Dyson (1868. 1939), the Belgian, Georges Lecointe (1869. 1929) and the Italian, Annibale Ricco (1844. 1919).
(Zanini et al. 2019)

- International Union of Geodesy and Geophysics, International Union of Pure and Applied Chemistry, International Union of Radio Science



- Srbija, odnosno Kraljevina Srba, Hrvata i Slovenaca (SHS), iako me u osniva ima Me unarodnog saveta za nau na istra0ivanja, na0alost, nije u estvovala u osnivanju Me unarodne astronomske unije (MAU).

FOUNDING MEMBERS INTERNATIONAL RESEARCH COUNCIL

Belgium	Brazil	United States of America
France	Greece	United Kingdom of Great Britain
Italy	Japan	Australia
Poland	Portugal	Canada
Rumania	Serbia	New Zealand
		South Africa

COUNTRIES DECLARED ELIGIBLE THROUGH 1922

China	Siam	Czecho-Slovakia
Chili	Denmark	the Argentine Republic
Spain	Mexico	Monoco
Norway	Holland	Sweden
		Switzerland

FOUNDING MEMBERS OF THE IAU

Belgium	Canada	Great Britain
France	Greece	Italy
Japan	Mexico	United States

ADDITIONAL IAU MEMBERS TO 1925

Australia	Brazil	Czecho-Slovakia
Denmark	Holland	South Africa
Norway	Poland	Portugal
Roumania	Spain	Sweden
		Switzerland

^a*Names of countries are as given in original IAU documents.*

Trimble (1997)



Prve komisije

Blaauw (1994)

The Standing Committees and their first Presidents are listed below [7]:

- No. 1, Relativity (A.S. Eddington),
- No. 2, Re-editing and publication of ancient works (J.L.E. Dreyer),
- No. 3, Notations and Units, and the format of publications (P. Stroobant),
- No. 4, Ephemerides (P.H. Cowell),
- No. 5, Abstracts and Bibliography (B. Baillaud),
- No. 6, Astronomical Telegrams (G. Lecointe),
- No. 7, Celestial Mechanics and Tables (H. Andoyer),
- No. 8, Meridian Astronomy (S.S. Hough),
- No. 9, Theoretical and Applied Astronomical Optics (M. Hamy),
- No. 10, Solar Radiation (C.G. Abbot),
- No. 11, Spectroscopic Velocities (H. Deslandres),
- No. 12, Atmosphere of the Sun (G.E. Hale),
- No. 13, Astronomical Expeditions (A. de la Baume-Pluvinel),
- No. 14, Wavelength Standards and Spectral Tables for the Sun (C.E. St. John),
- No. 15, Rotation of the Sun (H.F. Newall),
- No. 16, Physics of Planets (V. Cerulli),
- No. 17, Lunar Nomenclature (H.H. Turner),
- No. 18, Radiotelegraphic Longitude Determination (G. Ferrié),
- No. 19, Latitude Variation (H. Kimura),
- No. 20, Minor Planets (E.W. Brown)
- No. 21, Comets (A.O. Leuschner),
- No. 22, Meteorites (W.F. Denning),
- No. 23, Carte du Ciel (H.H. Turner),
- No. 24, Stellar Parallaxes (F. Schlesinger),
- No. 25, Stellar Photometry (F.H. Seares),
- No. 26, Double Stars (R.G. Aitken),
- No. 27, Variable Stars (S.I. Bailey),
- No. 28, Nebulae (G. Bigourdan),
- No. 29, Spectral Classification (W.S. Adams),
- No. 30, Stellar Radial Velocities (W.W. Campbell),
- No. 31, Time (R.A. Sampson),
- No. 32, Calendar Reform (G. Bigourdan).



Figure 2. Pictures from some General Assemblies. First GA, Rome, 1922. Note the first President, B. Baillaud, and the first General Secretary, A. Fowler.

Cesarsky (2019)

Generalne skupštine do II svetskog rata

I General Assembly

Rome, Italy, May 2 - 10, 1922

II General Assembly

Cambridge, UK, July 14 - 22, 1925

III General Assembly

Leiden, The Netherlands, July 5- 13, 1928

IV General Assembly

Cambridge, Massachusetts, USA,
September 2 - 9, 1932

V General Assembly

Paris, France, July 10 - 17, 1935

VI General Assembly

Stockholm, Sweden, August 3 - 10, 1938

Predsednici

1919-1922 Benjamin Baillaud (1848-1934)

1922-1925 William W. Campbell (1862-1938)

1925-1928 Willem de Sitter (1872-1934)

1928-1932 Frank Dyson (1868-1939)

1932-1935 Frank Schlesinger (1871-1943)

1935-1938 Ernest Esclangon (1876-1954)

1938-1944 Arthur S. Eddington (1882-1944)

Generalni sekretari

1919-1922 Alfred Fowler (1868-1940)

1922-1925 Alfred Fowler (1868-1940)

1925-1928 Frederick J. M. Stratton (1881-1960)

1928 -1932 Frederick J. M. Stratton (1881-1960)

1932 -1935 Frederick J. M. Stratton (1881-1960)

1935-1938 Jan H. Oort (1900-1992)

1938-1944 Jan H. Oort (1900-1992),

Walter S. Adams (acting GS during World War II)
(1876-1956)

Table 1. Chronology for IAU Member Countries

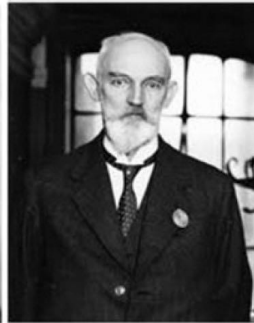
1920 Belgium	1927 Argentina	1961 Turkey	1992 Russian Federation	2006 Lebanon
1920 Canada			1992 Estonia	2006 Mongolia
1920 France	1932 Vatican	1964 Germany split: BRD / GDR		2006 Thailand
1920 Greece		1964 India	1993 Czech Republic	2009 Costa Rica
1920 Japan	1935 China	1964, 1979 Indonesia	1993 Slovakia	2009 Honduras
1920 United Kingdom	1935 Soviet Union	1964 New Zealand	1993 Lithuania	2009 Panama
1920 United States of America	1935 Yugoslavia	1964 DPR Korea	1993 Tajikistan	2009 Viet Nam
	1939 Australia		1993 Ukraine	
1921 Italy		1969 Iran (suspended)		2012 Ethiopia
1921 Mexico	1947 Chile		1994 Armenia	2012 Kazakhstan
	1947 Hungary	1970 Uruguay	1994 Georgia (suspended)	2012 DPR Korea
1922, 1961 Brazil	1947 Ireland		1994 Croatia	2015 Columbia
1922 Czecho-Slovakia		1973 Korea		
1922 Denmark	1948 Finland		1996 Latvia	2018 Nigeria (rejoining)
1922 Netherlands		1982 China Nanjing		2018 Morocco (rejoining)
1922 Norway	1951 Germany	1982 China Taipeh	1997 Central American Assembly of Astronomers	2018 Algeria
1922 Poland				2018 Jordan
1922 Romania	1953 Venezuela	1988 Iceland	1998 Bolivia (suspended)	2018 United Arab Emirates
1922, 1938 South Africa	1954 Israel	1988, 2001 Morocco (suspended)		2018 Mozambique
1922 Spain	1955 Austria	1988 Peru (suspended)	2001 Philippines	2018 Madagascar
1923 Switzerland	1957 Bulgaria	1988 Saudi Arabia (suspended)	2003 Nigeria	2018 Slovenia
1924 Portugal	1959 Taiwan		2003 Serbia	2018 Syria
1925 Egypt				
1925 Sweden				



B. Baillaud, 1919-1922



W. Campbell, 1922-1925



W. de Sitter, 1925-1928

Cesarsky (2019)

Figure 1. The first three IAU Presidents: B. Baillaud, 1919–1922; W. Campbell, 1922–1925; W. de Sitter, 1925–1928.

- Prema dostupnim podacima, Vojislav Mizkovi je prvi srpski/jugoslovenski predstavnik u MAU. Pre nego sto je Jugoslavija primljena, pismom od 31.3.1933. generalni sekretar MAU F.J.M. Stratton obavestio je rektorat UB da je Izvrzni komitet izabrao V. Mizkovi a za lana i to Komisije 20 za male planete ([God. nazeg neba za 1934, str.159](#)).

- Vojislav Mizkovi je bio naz predstavnik na V Kongresu u Parizu 1935. kada je i Kraljevina Jugoslavija zvani no primljena u MAU ([God. nazeg neba za 1936, str. 252](#)). Prema Zborniku sa kongresa u Parizu - *IAU Transactions B* ([Stratton 1936](#)) jedini navedeni jugoslovenski lan je V. Mizkovi (p.423) i nije navedeno da postoji jugoslovenski Nacionalni komitet za astronomiju (NKA) (p.412-414).



- U me uvremenu je oformljen NKA sa predstavnicima ([God. nazeg neba za 1938, str.247](#)):

· Srpske kraljevske akademije (SKA)

1) Milutin Milankovi , lan SKA, prof. Univ. u Beogradu

2) Vojislav Mizkovi , dopisni lan SKA, prof. Univ. u Beogradu

· Jugoslovenske akademije znanosti i umjetnosti (JAZU)

3) željko Markovi , prof. Univ. u Zagrebu

4) Stjepan Škreb, prof. Univ. u Zagrebu, upravnik Geofizi kog zavoda

· Univerziteta u Beogradu

5) Vja eslav žardecki, vanredni profesor Univ. u Beogradu

· Univerziteta u Zagrebu

6) Vladimir Vrkljan, vanredni profesor Univ. u Zagrebu

· Univerziteta u Ljubljani

7) Josip Plemelj, profesor Univ. u Ljubljani

- U periodu 17-22. decembra 1935. odr0ana su tri sastanka na kojima je usvojen nacrt statuta NKA, kasnije usvojen od strane Akademija, i izabrani predsednik, potpredsednik i sekretar, ime je konstituisan NKA za period 1936-1939.

Stjepan Škreb (1879–1952)

- Rodio se 13. jula 1879. u Zagrebu. Doktorirao je 1910. sa disertacijom "Utjecaj zemaljske rotacije na gibanja atmosfere". Bio je dugogodiznji upravnik Geofizi kog zavoda, redovni član JAZU, profesor Geofizike na Univ. u Zagrebu a držao je predavanja i iz drugih predmeta (Kosmi ka fizika, Fizika Sunca, Sferna astronomija. Nebeska mehanika, Atmosfera Zemlje i dr). U nau nom radu, S. Škreb se bavio meteorologijom, klimatologijom i geofizikom, uopšte. Preminuo je 14. avgusta 1952. u Zagrebu.



Željko Marković (1889-1974)

- Rodio se 20. februara 1889. u Slavonskoj Pošegi. Studirao je matematiku i astronomiju na Univerzitetu u Zagrebu, Pragu i Göttingenu. Doktorirao je 1915. godine na Filozofskom fakultetu u Zagrebu sa disertacijom "Primenjena linearnih integralnih jednačina na rešavanje diferencijalnih jednačina". Bio je prof. Univ. u Zagrebu i redovni član JAZU. Nau ni rad ž. Markovi a posve en je teoriji diferencijalnih i integralnih jedna ina i istoriji matematike (posebno delima Ruzičera Božkovi a), a bavio se i problemom tri tela. Preminuo je 23. avgusta 1974. u Opatiji.



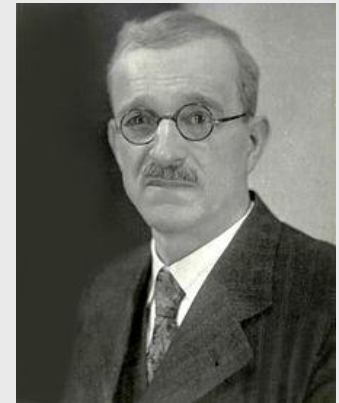
Vladimir Vrkljan (1894–1974)

- Vladimir Sre ko Vrkljan rodio se 26. avgusta 1894. u Sv. Petru-Orehovcu pokraj Križevaca. Studije matematike i fizike završio je 1917. godine na Filozofskom fakultetu Univ. u Zagrebu, gde je 1924. i doktorirao sa disertacijom *„Razvoj kvantne teorije crtanih optičkih spektara“*. Bio je redovni prof. Univ. u Zagrebu i dopisni član JAZU. U naučnom radu bavio se teorijskom fizikom, posebno kvantnom teorijom i teorijom relativnosti. Smatra se prvim hrvatskim fizičarem koji se intenzivno bavio kvantnom mehanikom. Preminuo je 1. marta 1974. u Zagrebu.



Josip Plemelj (1873–1967)

- Rodio se 11. decembra 1873. u Bledu. Školu je završio u Ljubljani, a zatim se 1894. upisao na Beogradski univerzitet gde je studirao matematiku, fiziku i astronomiju. U naučnom radu bavio se diferencijalnim jednačinama (na kojima je i doktorirao). Bio je prof. na Univerzitetu u Bernu, profesor na Univerzitetu u Ukrajinu, prvi rektor Univ. u Ljubljani 1919, dopisni član JAZU od 1923, SKA od 1930. i redovni član Slovenske akademije nauka i umetnosti od uspostavljanja 1938. Preminuo je 22. maja 1967. u Ljubljani.



Vjačeslav Žardecki (1896–1962)

-Rođen je 16. aprila 1896. u Odesi, danasnja Ukrajina, u porodici poljskog porekla. Osnovnu, srednju školu i Prirodno-matematički fakultet je završio u rodnom gradu. Godine 1920. je napustio Rusiju, doselio se u Srbiju i zaposlio na Astronomskoj opservatoriji u Beogradu. God. 1923 je odbranio disertaciju o kretanju vrstog tela na krivoj liniji, 1925. postaje docent, a 1939. redovni prof. Univ. U Beogradu. Tokom rata napušta beogradski univerzitet. U poratnom periodu boravi u Austriji, gde predaje na Univerzitetu u Gracu, da bi 1949. emigrirao u SAD i zaposlio kao istraživač na Geološkoj opservatoriji Lamont pri Univerzitetu Kolumbija u Njujorku. U naučnom radu bavio se hidrodinamikom, racionalnom mehanikom, astronomijom i geofizikom. Preminuo je u Njujorku, 23. oktobra 1962.

- napisao je 2 univerzitetska, kao i 3 monografije
- njegov sin Oleg ustanovio je 1992. nagradu na Geopservatoriji Lamont-Doherty koja nosi oboje ime.



Lamont-Doherty Earth Observatory
COLUMBIA UNIVERSITY | EARTH INSTITUTE

W. S. Jardetzky Lecture



- Prema Zborniku sa kongresa održanog 1938. u Stokholmu ([Oort 1939](#), p.501), Jugoslavija ima 6 članova, predsednik NKA je Milutin Milanković, sekretar Vojislav Mizković.

YUGOSLAVIE

Président: M. Milankovitch.

Vice-Président: M. Škreb.

Secrétaire: M. Michkovitch.

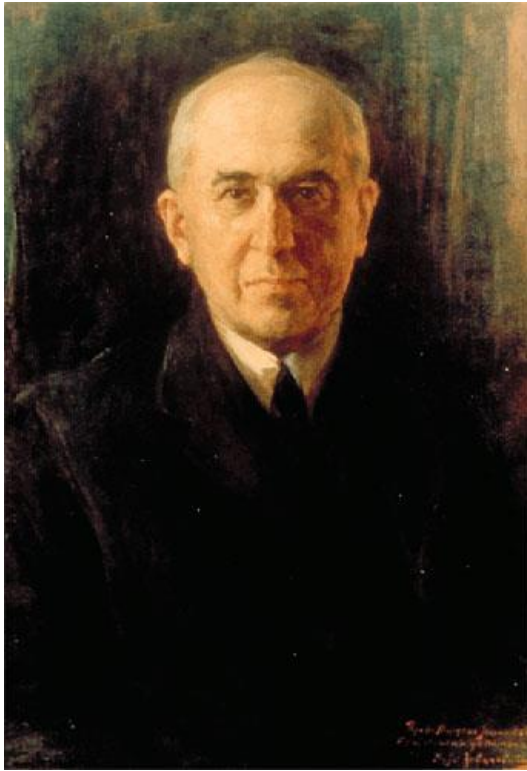
Membres: MM. Jardecky, Terzić, Vrkljan.

Milorad Terzić (1879–1939)

- Rođen je 6. aprila 1880. godine u Kragujevcu. Gimnaziju je završio u Kragujevcu, nakon čega upisuje Nišu zgradu Vojne akademije. Geodetski kurs je završio u Nikolajevskoj inženjerskoj akademiji u Petrogradu. U Balkanskim ratovima 1912-1913. i I sv. ratu 1914-1918. bio je topograf u 2. armiji i u Topografskom odeljenju Vrhovne komande. Posle rata postaje šef Astronomsko-geodetskog odeljka Saobraćajnog odeljenja Gl. generalštaba (1920-1928) i predavač na Nišskoj školi Vojne akademije (1920-1921). U periodu 1937-1939, kao geodetski general, bio je na čelu Vojnog Geografskog instituta (VGI). Preminuo je u Beogradu 28. maja 1939.



- U Zborniku sa kongresa održanog 1948. u Cirihu, (Oort 1950) navedena su samo dva jugoslovenska imena: M. Milanković i V. Mišković .



Milutin Milanković (1879-1958)



Vojislav Mišković (1892-1976)

- IAU se razlikuje od prakti no svih unija organizovanih pod okriljem IRC u tome zto ima individualne lanove (po ela je sa oko 200, da bi vek kasnije imala preko 13500 lanova.

- druga posebnost su bile komisije . 55 ih je formirano, 15 ukinuto u periodu 1922. 2015. (kada je dozlo do reorganizacije strukture na divizije (A-J)/nove komisije/radne grupe), po elo je sa 32 nakon WWI, nakon WWII formirano je 14 (Montmerle 2019) (npr. Komisija 34, za me uzvezdanu materiju, Komisija 42, za tesne dvojne sisteme, Komisija 46, za obrazovanje u astronomiji)

-V. Mizkovi je lan Komisija 19, 20 (za promenu geografske zirine i male planete), M. Milankovi Komisije 7 (za nebesku mehaniku) (Oort 1950)

- nemerljiv zna aj Unije i komisija za me unarodnu saradnju i standardizaciju:

- Komisija 3, za notaciju i jedinice . troslovne oznake za sazve0 a, m i M za prividne i apsolutne magnitude, a za veliku poluosu, astronomske jedinice i parseci kao jedinice za udaljenosti, ...

-Komisija 6, za astronomske telegrame . redovna obaveztenja o otkri ima (komete, asteroidi, nove, supernove, ...)

- %zbacivanje+Plutona iz planeta

- Herczprung-Raselov dijagram, Habl-Lemetrov zakon

HVALA NA PAŽNJI !

A thick black curved line that starts on the left side of the slide and curves downwards towards the right side.