“The Vilnius Gediminas technical university”

“The international conference

"Electrical, electronic and information sciences"”

the 22nd of April 2021 y.

The theme of scientific report

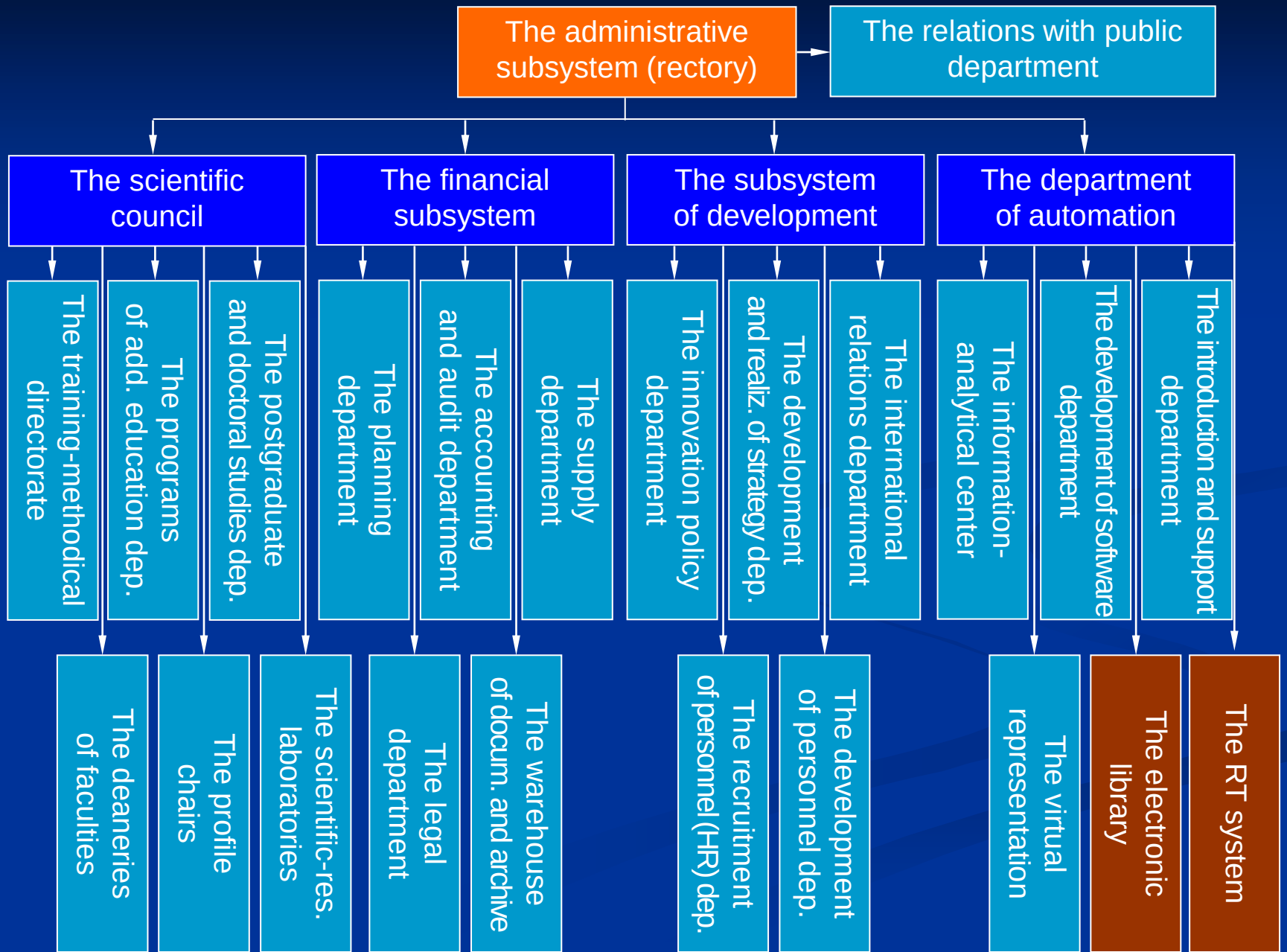
“The features of the electronic card for the automated training system with the properties of adaptation based on the cognitive models”

The section “Information systems”

The reporter: “"the author of the unique technology" of cognitive modeling for the system, financial and complex analysis”,
The President of “SIO "Academy of cognitive natural sciences"”
Vetrov Anatoly Nikolaevich (The Russian Federation, Saint-Petersburg city)

The republic of Lithuania, Vilnius city, 2021 y.

The features of the organizational structure of the educational establishment at the informatization of the information-educational environment



The genesis and tendences of development of the storages of information and the electronic cards of memory

The storage of information based on the punched-cards

The storage of information based on the punched-tapes

On the paper carrier (196x y.)

STR – Streamer (the storage of information based on the magnetic tape)

FDD – Floppy Disc Drive (the storage of information on the floppy magn. discs)

HDD – Hard Disc Drive (the storage of information on the hard magn. discs)

On the magn. carrier (197x y.)

CD-ROM – Compact Disc Read Only Memory (the laser storage of inf. on the optical discs)

CD-R – Compact Disc Recordable (the opt. disc of the single-time technol. cycle of record of the inf.)

CD-RW – Compact Disc ReWritable (the opt. disc of the multi-time technol. cycle of record of the inf.)

DVD-ROM – Digital Video Disc Read Only Memory (the laser storage of inf. on the optical discs)

SS/DS – Single Side/Double Side (one-/ two-sided)

SL/DL – Single Layer/Double Layer (one-/ two-layered)

On the opt. carrier (198x y.)

Flash (external) and Edrive (internal) (the storage of information based on the electronic cards of memory)

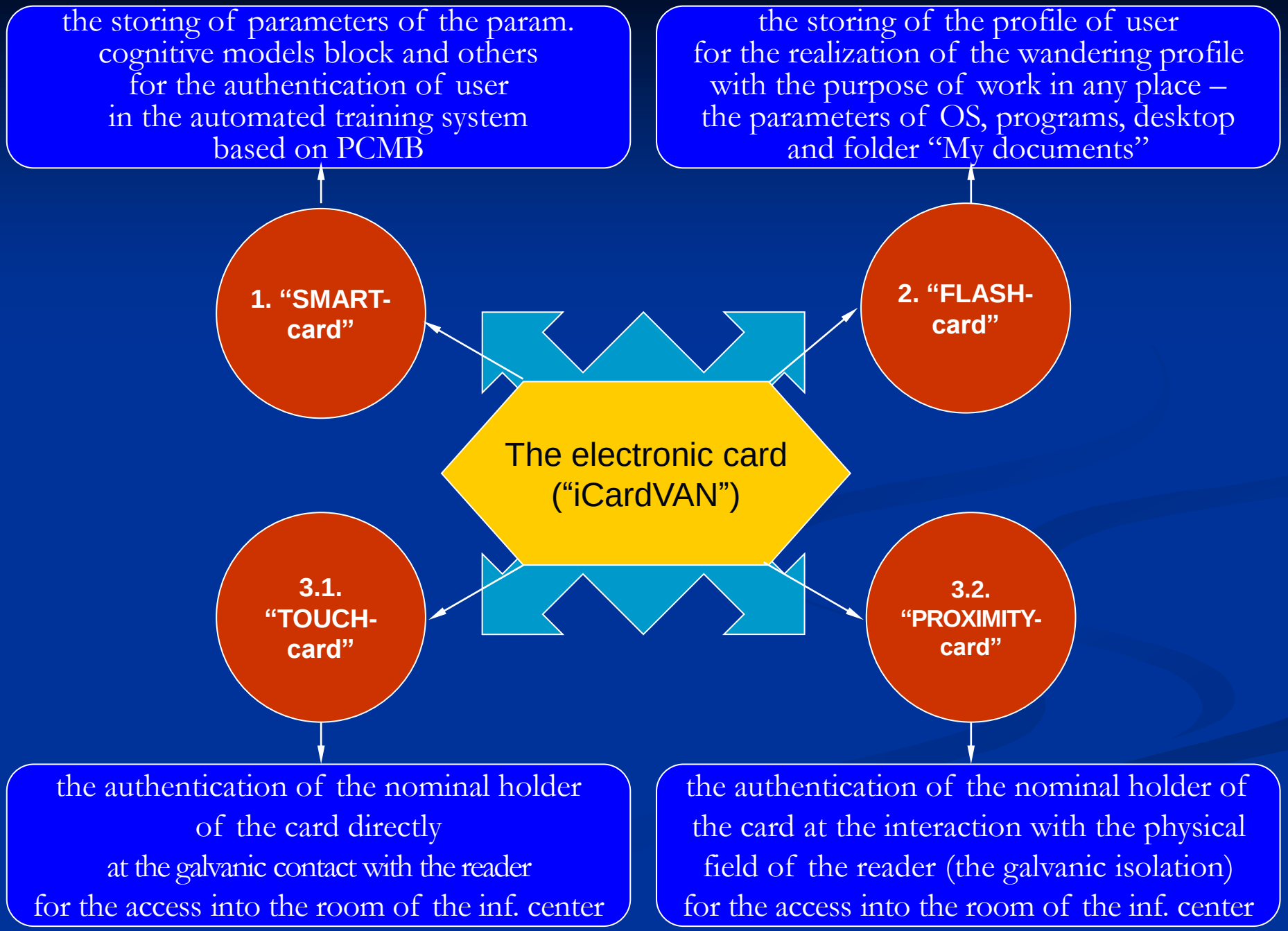
SD – Secure Digital Card/ MS – Memory Stick Card (the external port. storage of inf. on the el. cards of memory)

SMART – System Monitoring and Alerting (the storage of inf. based on the chip-cards)

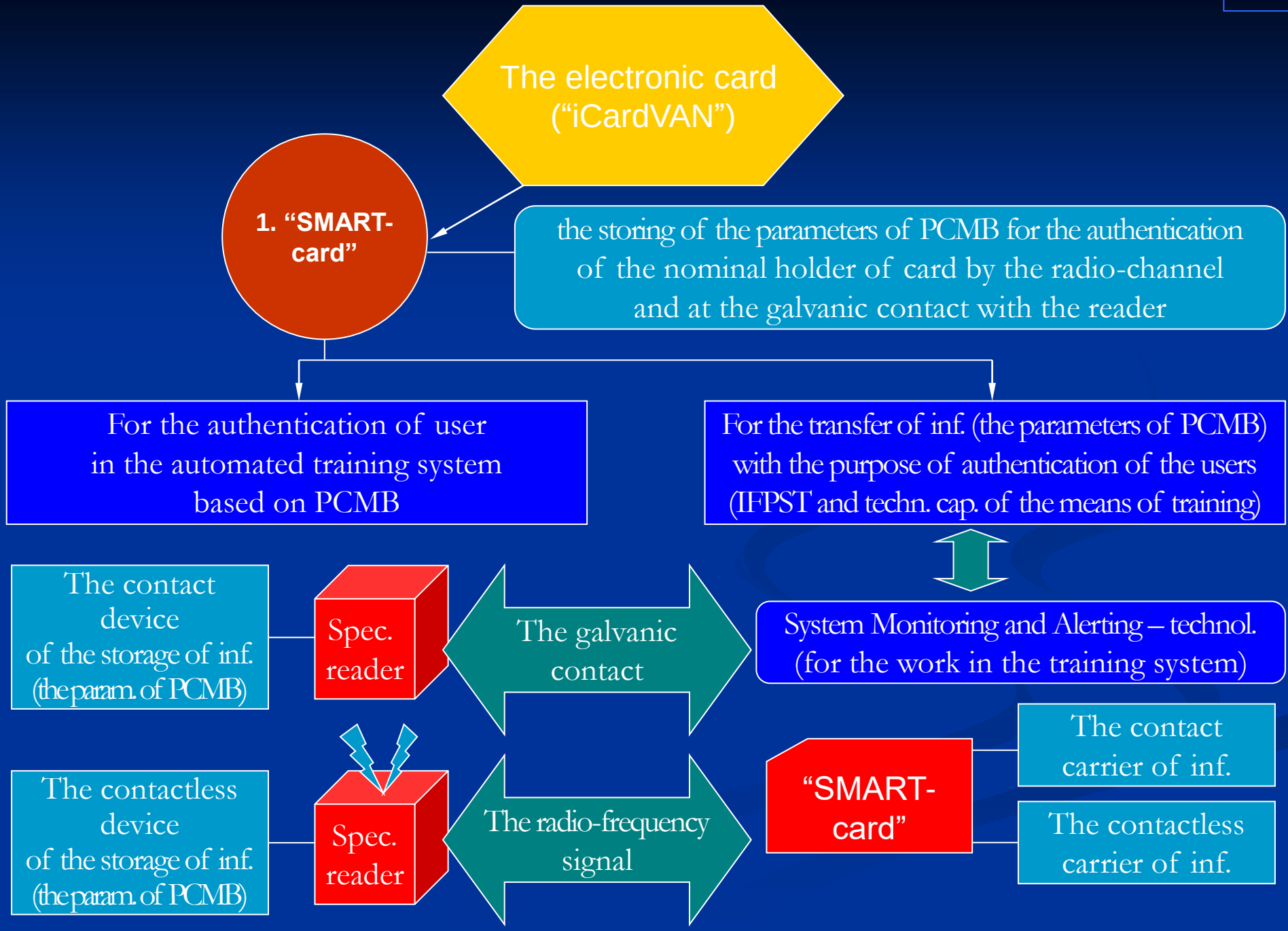
TOUCH/PROXIMITY (the storage of inf. based on the electronic cards for the control of access)

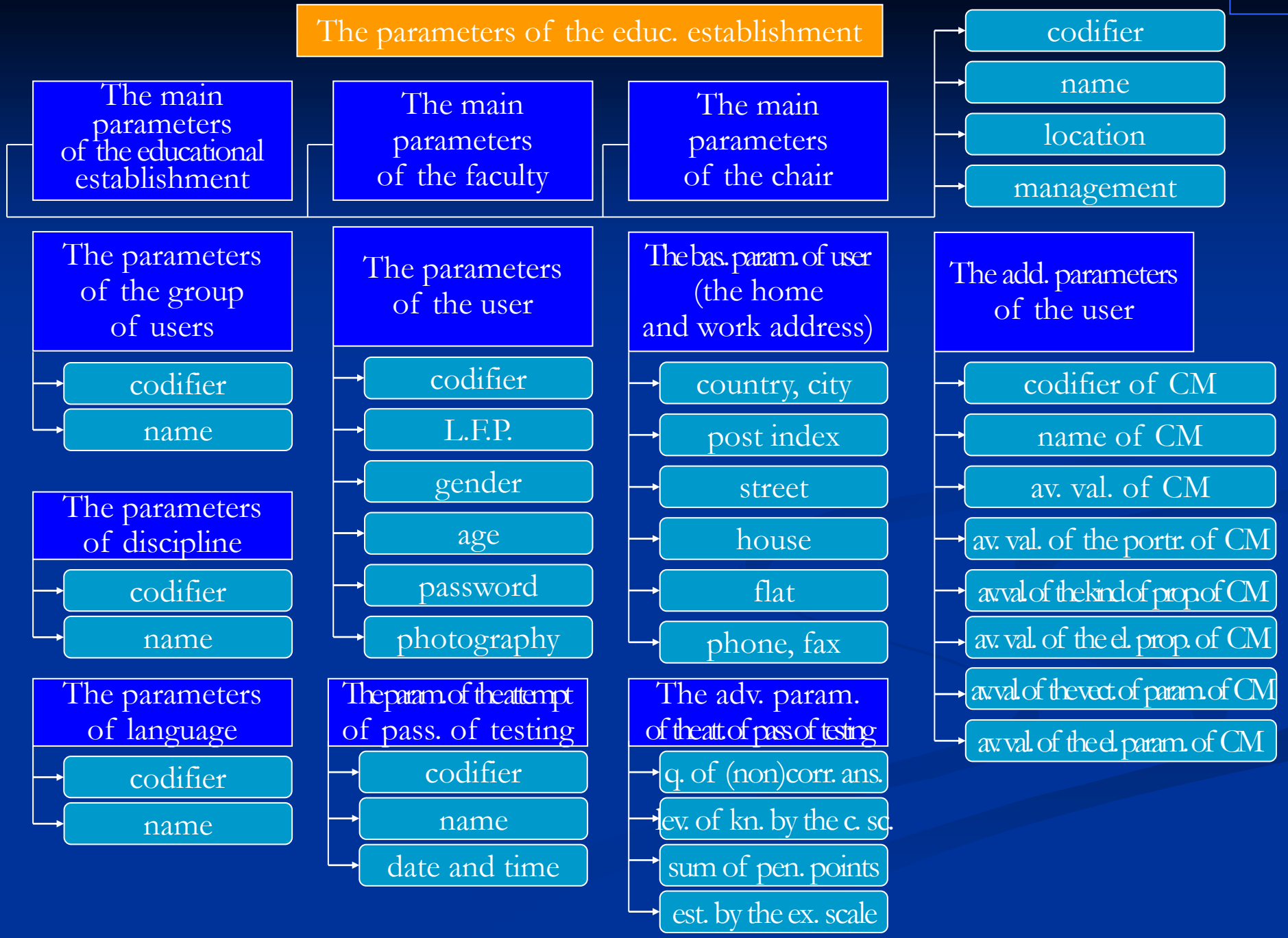
On the electronic carrier (199x y.)

The structure of the electronic card “iCardVAN”

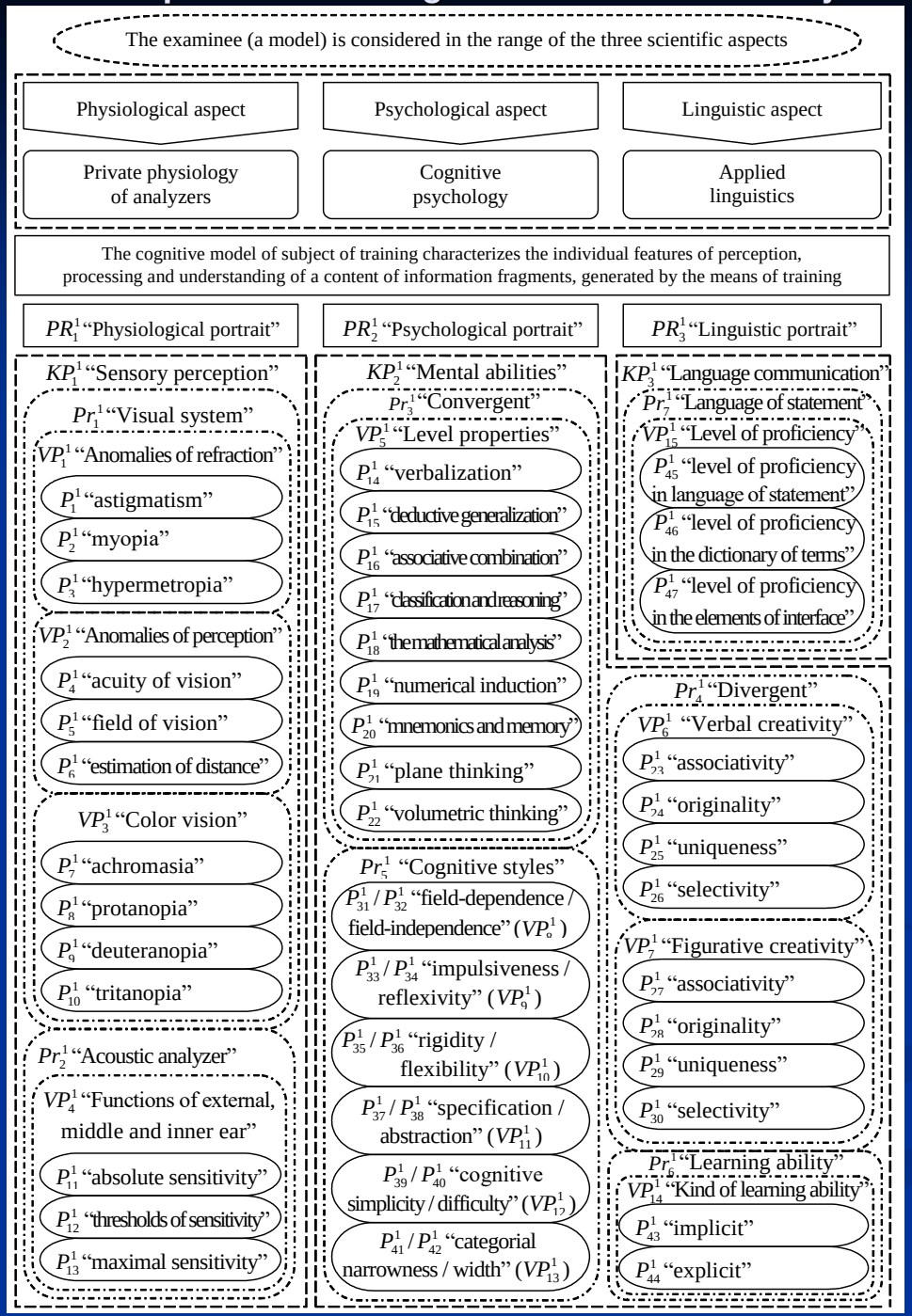


The structure of “SMART-card” in the basis of the electronic card “iCardVAN”

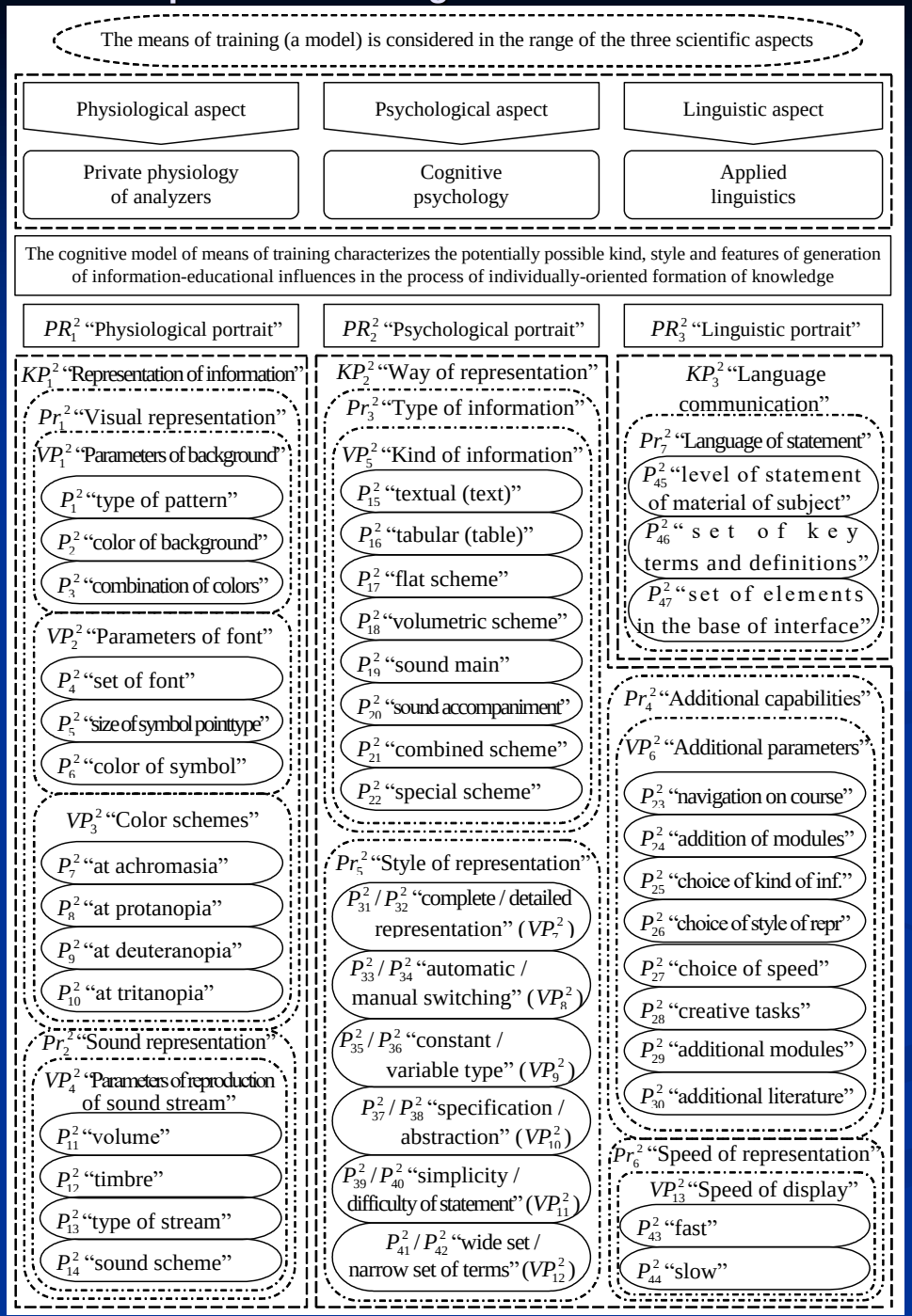



The parameters of the educ. establishment
codifier
name
location
management
The main parameters of the educational establishment
The main parameters of the faculty
The main parameters of the chair
The parameters of the group of users
codifier
name
The parameters of discipline
codifier
name
The parameters of language
codifier
name
The parameters of the user
codifier
L.F.P.
gender
age
password
photography
The param. of the attempt of pass. of testing
codifier
name
date and time
The bas. param. of user (the home and work address)
country, city
post index
street
house
flat
phone, fax
The adv. param. of the att. of pass of testing
q. of (non)corr. ans.
ev. of kn. by the c. sc.
sum of pen. points
est. by the ex. scale
The add. parameters of the user
codifier of CM
name of CM
av. val. of CM
av. val. of the portr. of CM
av. val. of the kind of prop. of CM
av. val. of the el. prop. of CM
av. val. of the vect. of param. of CM
av. val. of the el. param. of CM

The structure of the parametrical cognitive model of the subject of training



The structure of the parametrical cognitive model of the means of training



The structure of “FLASH-card” in the basis of the electronic card “iCardVAN”

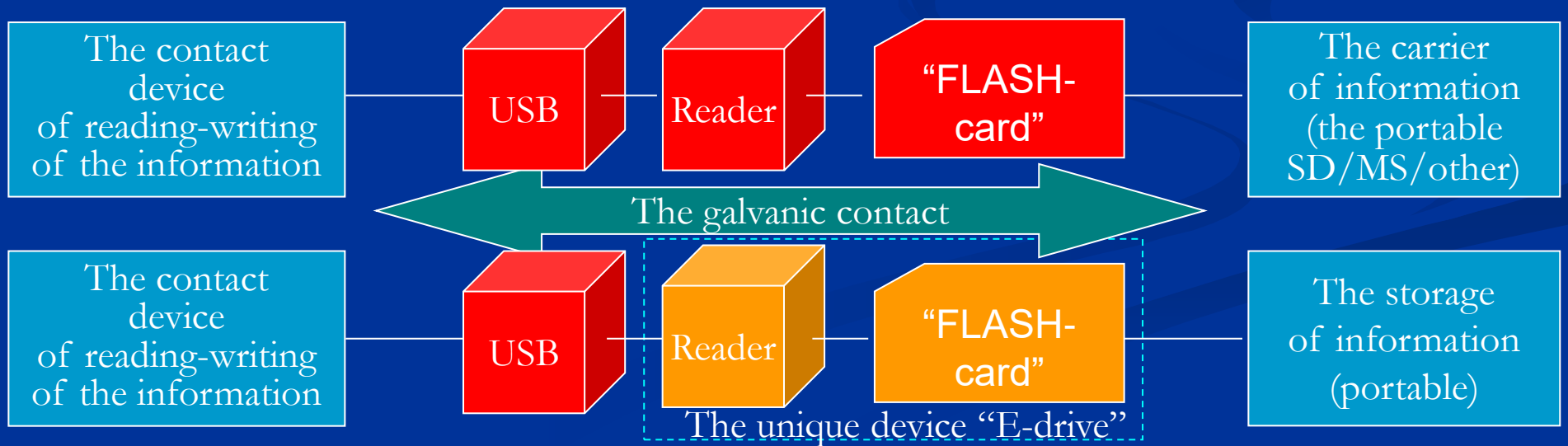
The electronic card (“iCardVAN”)

2. “FLASH-card”

the storing of the profile of user for the realization of wandering profile - the parameters of oper. system, programs, desktop, folders "My documents" and others

For the reading / writing of inf. and the working of user in the system of autom. training based on PCMB and any other places (the place of residence and the place of work)

Electrically Erasable Programmable Read Only Memory Flash – technol. (for the work in any place)



The structure of “TOUCH (Memory)-card” in the basis of the electronic card “iCardVAN”

The electronic card (“iCardVAN”)

3.1. “TOUCH-card”

the authentication of the nominal holder of the card directly at the galvanic contact with the reader

For the authentication of the user in the room (the entering of the code of access) (the autom. train. system based on PCMB)

For the transfer of the inf. required for the authentication of users (the database of the codes of access into the room)

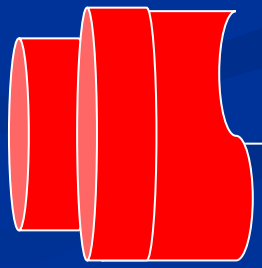
“iButton” “Dallas Semiconductor” “DS1990A-FS” (for the access into the room)

“iButton” “Dallas Semiconductor” “DS1996” (for the transfer of information)

The device of reading-writing of the information (reader)

Spec. reader

The galvanic interaction



The carrier of information (“TOUCH-card”)

The structure of “PROXIMITY-card” in the basis of the electronic card “iCardVAN”

The electronic card (“iCardVAN”)

3.2. “PROXIMITY-card”

the authentication of the nominal holder of the card at the interaction with the physical field of reader (the galvanic isolation)

For the authentication of user in the automated training system based on PCMB

(for the access into the room)

For the transfer of inf. required for the authentication of users (the database of the codes of access of the users)

(for the transfer of information)

The device of reading-writing of the information (reader)

Spec. reader

The radio-frequency signal

“PROXIMITY-card”

The carrier of information (“PROXIMITY-card”)